PRACTICAL PHYSIOLOGY.

Lectures ON EXPERIMENTAL PHYSIOLOGY.

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LECTURE IV.

INNERVATION.—THE CONDUCTION OF NERVE ENERGY.

GENTLEMEN,—We have studied in a general way that which concerns energy and irritability. In my first lecture I mentioned the forms of energy which are evolved by the tissues of living beings; in my second I discussed the nature of irritability and irritants; in my last I demonstrated that the irritability of the tissues may be increased or diminished by various agents.

We shall now investigate the physiology of the nervous system. You have seen what happens when we stimulate a living nerve connected with a muscle. You have had experimental evidence of the fact that, on stimulating a nerve, energy is evolved, and that this energy travels along the nerve and causes the muscle to contract. We term this form of energy nerve energy. We have already studied (Lectures II. and III.) the agents which cause a nerve to evolve energy, as well as those which increase or diminish the readiness with which it does this. We shall now experiment with a view to ascertain the rapidity with which the energy travels along the nerve. We shall stimulate a motor nerve, and then we shall measure the time which the energy takes to pass along a certain length of nerve. To Helmholtz, the distinguished Professor of Physiology in Heidelberg, we are indebted for the means which first enabled physiologists to measure the velocity of nerve energy. Before he undertook the investigation of this recondite subject nothing but vague fancies prevailed regarding the speed of nerve transmission. The generally prevalent notion was that nerve actions are so rapid that the quickness of thought might well be regarded as proverbial, even in the case of individuals whose close alliance to a certain quadruped is not indicated by preternatural elongation of the ears. But even the least asinine of mortals require "time to think," and that time, though short, is nevertheless quite measurable. We shall, however, put the velocity of thought out of the question meanwhile, and shall busy ourselves with the mensuration of the velocity of nerve energy as it passes along the motor nerve of a frog. We take this animal because nerve energy travels at a slower rate in cold than in warm blooded animals.

Several instruments have been invented for the purpose of measuring the rate of nerve force. The one I show you is that which has been invented by Helmholtz, and to some extent modified by Du Bois Reymond. It is named Helmholtz and Du Bois Reymond's myograph. It is intended not merely for the purpose I mention, but also for studying muscular contraction. For this purpose it has, however, been superseded by more suitable instruments invented by Marey. [It would be inconvenient to repeat here the lengthened description which was given of this instrument. A full account, with numerous engravings, will be found in Morgan's "Electro-therapeutics"; New York, 1868. The reader will, however, understand the essential parts of the apparatus, and the manner in which they are used for the performance of the experiment above referred to, by a perusal of the following.]

The instrument consists of three principal parts. First: a cylinder (c′), turned by clock-work, provided with a dial by which the rate of the cylinder's evolution in a given time may be ascertained. The cylinder's surface is covered with glass, which is smoked before each experiment, in order that tracings may be made on it by means of a stilette (s). Second: apparatus for holding the leg of a frog, and for connecting a beam (B), bearing the stilette, with a muscle. The femur is fixed in the forceps (F); the tendo Achillis is hooked to the brass beam (B). This beam is movable in a vertical direction. When the muscle contracts, the beam is raised, and with it the stilette. A tracing indicating this movement is produced by the stilette upon the smoked cylinder. The muscle and nerve are covered by a glass

FIG. 9.

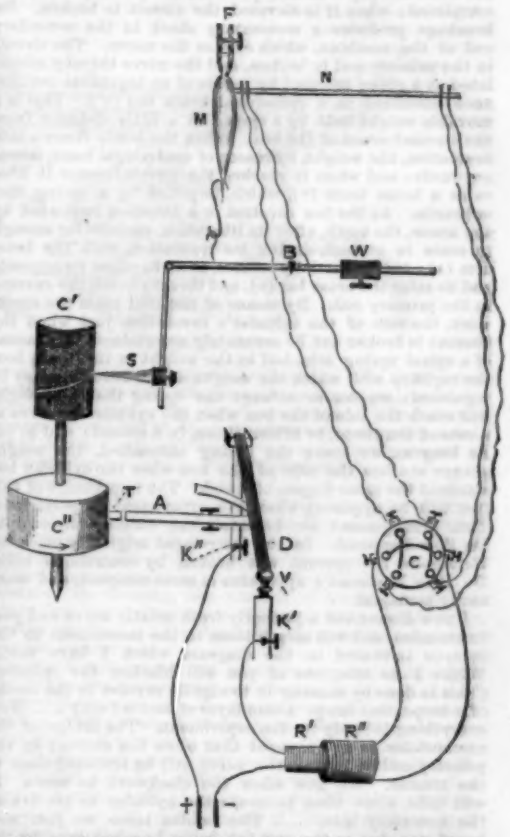


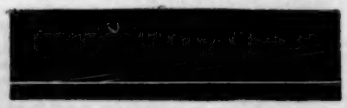
Diagram showing the principal parts of Helmholtz and Du Bois Reymond's myograph, and the manner in which the nerve of a frog is stimulated with a view to ascertain the rapidity with which nerve force is transmitted along it. N, Sciatic nerve. M, Gastrocnemius. F, Forceps. B, A movable beam joined to the muscle by means of a hook. W, A movable weight. S, A stilette for making a tracing on the blackened cylinder (c′). x′, Primary coil. x″ Secondary coil of Du Bois Reymond's induction machine. C, Commutator, with wires joining it to secondary coil of induction machine and to the nerve. D, A brass bar, hinged at one end to a brass pillar (x″), and resting with its other end upon another brass pillar (x′) by means of a brass pin (v). The bar (D) and the brass pillars (x′ and x″) form a part of the primary electrical circuit. When the bar (D) is raised, v is removed from x′, and the primary circuit is thereby broken. When the cylinder (c″), revolving in the direction indicated by the arrow, has attained a given speed, a brass tooth (T) springs out to a distance from the cylinder's surface, greater than that represented in the diagram. It then, in its revolution, comes in contact with the brass bar (A), which it causes to rotate upon a vertical axis. Its end under the sloping bar (D) is turned towards v, and the bar (D) is thereby lifted up, causing breakage of the primary circuit in the induction machine, and the appearance of a momentary current in its secondary circuit.

shade containing moist blotting-paper, to prevent drying of the tissues. Third: arrangements by which the sciatic nerve is irritated at a given moment. The nerve is excited by the shock produced in the secondary coil of an induction machine by breaking the current in the primary circuit. The nerve is laid upon two pairs of wires connected with a commutator: one pair is placed near the muscle, the other pair is placed near the free end of the nerve. The object of the experiment is to ascertain the time taken by the nerve-influence to pass from the piece of nerve on the one pair of wires to that on the other pair. The commutator is con-

nected with the secondary coil (R″) of Du Bois Reymond's induction machine. Two wires are attached to the primary coil (R′): one of these goes to the battery (one Daniell or Grove's cell); the other is joined to a brass pillar (K′). A third wire is joined to the battery and to the brass pillar (K″). A movable brass bar (D) joins K′ and K″ when the pin (V) is in contact with the top of the pillar (K′): when the brass bar (D) is in this position, the primary circuit is completed; when it is elevated, the circuit is broken. Its breakage produces a momentary shock in the secondary coil of the machine, which excites the nerve. The circuit in the primary coil is broken, and the nerve thereby stimulated at a given moment by means of an ingenious contrivance contained in a cylindrical brass box (C″). This is a movable weight held by a spring at a little distance from the circumference of the box. When the box is thrown into revolution, the weight, by reason of centrifugal force, moves outwards; and when it reaches the circumference it liberates a brass tooth (T), which, impelled by a spring, flies outwards. As the box revolves in a direction indicated by the arrow, the tooth, after its liberation, projects far enough to come in contact, during its revolution, with the brass arm (A); this it partially rotates, so as to cause its opposite end to raise the brass bar (D), and thereby break the current in the primary coil. By means of the dial upon the clockwork, the rate of the cylinder's revolution just when the current is broken can be accurately ascertained. By means of a spiral spring attached to the weight in the brass box, the rapidity with which the weight moves outwards may be regulated: we can so arrange the spring that the weight will reach the side of the box when the cylinder revolves at a rate of ten times, or fifteen times, in a second; and so on. As long as we leave the spring untouched, the weight always reaches the side of the box when the cylinder has attained the same degree of speed. The importance of this fact will be apparent when the experiment is performed. This arrangement for breaking the current we owe to Du Bois Reymond. In the instrument originally made by Helmholtz the current was broken by centrifugal balls. Du Bois Reymond's apparatus is more compact, and more easily managed.

I now dissect out a perfectly fresh sciatic nerve and gastrocnemius, and will attach them to the instrument in the manner indicated in the diagram which I have made. While I do this, one of you will blacken the cylinder. (This is done by causing it to rapidly revolve in the smoke of a turpentine lamp. A *thin* layer of soot is best.) ..... Now everything is ready for the experiment. The bridge of the commutator is so arranged that when the current in the primary coil is broken the nerve will be irritated close to the muscle. We now allow the clockwork to move. It will take some time to cause the cylinder to revolve at the necessary rate. ..... The sudden noise we just now heard was due to the arm (K) being knocked over by the tooth (T). You saw that the muscle contracted immediately thereafter. I now put on the drag and stop the machine. Look at the surface of the cylinder, and you will see a horizontal and a curved line (similar to those in Fig. 10.) The horizontal line is produced during rest, the

FIG. 10.



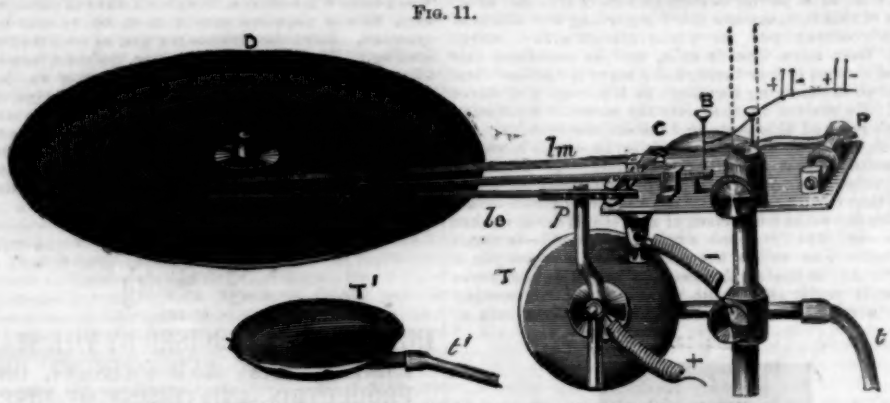
Tracings produced on the blackened cylinder of the myograph during the performance of the experiment described in the text.

curve is produced during contraction of the muscle. I shall make a mark at the point where this curve leaves the horizontal line, so that we may know that this curve indicates the muscular contraction produced by stimulating the nerve close to the muscle. (This curve is the higher of the two in Fig. 10.) We shall now repeat the experiment. This time, however, we turn the bridge of the commutator so that not the portion of the nerve near, but that distant from the muscle shall be irritated. ..... If you now examine the cylinder's surface you will find two curves instead of one. That last produced is a little further along the cylinder than the first. The cylinder has had time to move round a little further in this case ere the contraction of the muscle ensued. To what can this be owing save the fact that in this instance the energy generated in the nerve by the irritant has had to travel through a greater extent of nerve? The interval between the origins of the two curves from the horizontal line indicates the period of time taken by the nerve energy to pass from the one irritated point of nerve to the other. We now want to find out the value in time of this interval upon the cylinder's surface. We must first of all measure the length of the interval. For this purpose I take a sheet of thin gelatine, slightly moisten one of its surfaces, and roll the cylinder along it. The soot adheres to the gelatine, and you see that a distinct impression has been taken (similar to that in Fig. 10.) We can readily preserve such tracings by varnishing them with photographer's varnish. Now that we have the tracing upon a flat surface it is easy, by means of a pair of compasses and a scale, or, if necessary, a micrometer, to measure the interval between the origins of the curves. I find that this is $\frac{1}{4}$ in. What is the value in *time* of this space? To answer this question, of course we must know the circumference of the cylinder and the rapidity with which the cylinder revolved when the curves were made upon it. The circumference of the cylinder is 6 in. Let us set the instrument in motion again, and ascertain how often the cylinder revolves in a second when the nerve is irritated. The little hand upon the dial of the apparatus moves once for every 15 revolutions of the cylinder. By comparing its movements with those of the seconds-hand of a watch, we can ascertain the rate of movement with nearly absolute precision. ..... We have seen, then, that the cylinder revolves 15 times in a second when the nerve is irritated; hence $6 \times 15 = 90$ in. of a horizontal line upon the cylinder's surface (see Fig. 10) = 1 sec. If 90 in. are equal to 1 sec., $\frac{1}{4}$ in. must necessarily equal $\frac{1}{360}$ sec. The nerve energy therefore took this fraction of a second to travel through the portion of nerve between the two pairs of wires. (See Fig. 9.) I divide the nerve close to the wires, so as to remove the portion which intervenes between the near and the distant pairs. We measure the length of this. It is 2 in. The nerve energy has therefore, in this experiment, taken $\frac{1}{360}$ sec. to travel through 2 in. of nerve. It will therefore take $\frac{1}{180}$ sec. to pass along 1 ft., and obviously its velocity must be 90 ft. per second. The speed varies in different cases, and even in the same nerve in different conditions. The result obtained by us represents the average for the nerve of the frog.

An ingenious and simple myograph has been invented by Marey for performing experiments such as the one I have shown you. I have always been in the habit of using Helmholtz's instrument, and, as it works satisfactorily, I have not procured that invented by Marey. I show you a drawing (Fig. 11) of the instrument, however, in order that you may have an idea of another manner in which this experiment may be done. The tracings are in this case made upon a glass disc (D) blackened on its upper surface. The axle of the disc is fixed to the axle of Foucault's regulator on Secretan's registering apparatus. By this apparatus a sufficiently great and uniform speed may, according to Marey, be obtained. The femur of a frog is fixed in a pair of forceps (F). A hook (C) connects the tendo Achillis with a long lever (*lm*), one end of which can make a tracing on the blackened disc. The tracing produced by this lever indicates the state of the muscle. A lever (*lc*) similar to this is connected with electrical arrangements for irritating the nerve. The movement of this lever indicates when the nerve is stimulated. The electrical arrangements for irritating the nerve are similar to those employed with Helmholtz's apparatus (see Fig. 9); only here the nerve is stimulated by an induction shock, produced by closing instead of opening the current in the primary circuit of the induction machine. One of the wires of the primary circuit is connected with the lever (*lc*). The other wire is fixed to a metal disc on the india-rubber membrane, which covers a drum or tambour (T) filled with air, which communicates with an air-bag through the tube *t*. (The tambour and its tube are shown isolated, T′ and *t*′.) A copper rod (*p*) is connected to the disc and the wire on the tambour. This rod projects behind the lever (*lc*); and when air is driven into the tambour, and its membranous covering is stretched, the rod (*p*) is carried against the lever (*lc*), and the primary circuit is thereby completed, an induction shock produced, and the nerve thereby irritated.

The two levers rest upon a T-shaped arm, to which is attached the handle (B). By means of this they can be raised from the disc, or permitted to come into contact with it. When the clockwork has been set in motion, and the disc has attained its full speed, the levers are permitted to fall upon the disc. When at rest they describe two circles. Air is then forced into the tambour (T); the copper rod (p) is forced against the lever (l c); their

FIG. 11.



Marey's myograph for measuring the velocity of nerve energy. (For description see text.)

contact closes the primary circuit of the induction machine, and thereby irritates the nerve. The lever is movable, however, and is pushed to one side by the rod. The moment that the nerve is irritated is, therefore, indicated by the commencement of a deflection from the circle described on the disc by the lever when at rest. The contraction of the muscle draws the lever (l m) to one side, and so a deflection is made from the circle made by this lever when at rest. The interval between the commencement of the deflections from the circles produced by the two levers when at rest indicates the time which elapses between the stimulation of the nerve and the contraction of the muscle. This time is shorter when the nerve is stimulated near than when it is stimulated at a distance from the muscle. The value in time of any portion of the circles produced on the disc by the levers is ascertained by registering the vibrations of a tuning-fork upon the blackened surface. The rapidity of the tuning-fork's vibrations is constant, and is, of course, known beforehand. (The reader is requested to study Fig. 12.) The two pairs of circular

FIG. 12.

Tracings taken by Marey's myograph (see Fig. 11). The blackened disc rotates in a direction indicated by the arrow at C. T, waves produced by the vibrations of a tuning-fork. (See text.)

white lines are produced by the levers during a state of rest. The short curve at n was produced by deflection of the lever, l c (Fig. 11), and indicates the time when the nerve was irritated far from the muscle. The short curve at m was produced by deflection of the lever (l m), and indicates the time when the muscle contracted. The interval between the origins of the two curves can be readily ascertained by drawing two lines, c_2 and c_2, from the centre to the circumference of the disc. This enables one to readily ascertain how many vibrations of the tuning-fork correspond to the interval between n and m. The pair of lines nearer the centre of the disc indicate the results of irritating the nerve *close* to the muscle; n' indicates the time when the nerve was irritated, and m' the commencement of the muscular contraction. The duration of this interval is estimated by counting the number of vibrations of the tuning-fork which it occupies. This can be readily done by drawing the lines c and c_1 from the centre to the periphery, as in the former case.

Time will not permit me to show you to-day how the velocity of nerve-energy may be measured in human nerves. We must postpone this to the commencement of our next meeting. Let me say, however, that nerve energy travels faster in man than it does in the frog; in fact, as I have already informed you, it travels faster in warm- than in cold-blooded animals. While in the motor nerves of the frog the average rate is, according to Helmholtz, 90 feet per second, in the motor nerves of man Helmholtz and Baxt find it to be 111 feet per second.

The velocity with which nerve energy travels may be increased or diminished. 1st. Cold diminishes it; heat increases it. It is important to remember this. I often find that when the temperature is high, the energy travels along even frogs' nerves with such rapidity that the instrument which I have shown you fails to measure it. In such a case the rapidity of the nerve transmission may be readily diminished by placing a shallow vessel with a mixture of pounded ice and salt within the glass chamber containing the nerve. 2nd. A weak state of the nerve increases the velocity. It is quite easy to perform the experiment which I have shown you if you take well-nourished frogs which have just come from their native resorts; but when you have to deal with frogs which are weak from want of sufficient nourishment, you will find how difficult it is to get a result such as that obtained by us to-day. The velocity is so great in this case that it may be scarcely measurable. 3rd. A continuous electrical current has a decided influence on the velocity. We have already seen (Lecture III.) that the − pole of a weak galvanic current increases nerve excitability. The − pole of a powerful current, as well as the + pole of a current of any strength, lowers the excitability. Von Bezold has stated ("Uber die Electrische Erregung der Nerven und Muskeln," 1851, pp. 109–155) that the rapidity of nervous transmission is always diminished by both the − and + poles of a continuous electrical current. Everyone has adopted Von Bezold's conclusion; but it is, nevertheless, quite erro-

neous, and of this I have assured myself often enough to speak with decision. Von Bezold was not aware of what I have already pointed out to you (Lecture III.)—to wit, that while the − pole of a weak current increases excitability, that of a powerful current lowers it. He, in ignorance of this fact, experimented regarding the effects of a galvanic current upon nerve transmission with a current derived from *seven* Grove's cells, and he permitted this powerful current to flow through the nerve *for at least three minutes* before observing its effects on the velocity of nerve energy. He arrived at the perfectly accurate conclusion that both poles of this current diminish the velocity. He was much struck by the fact that while the − pole increases nerve excitability, it lowers nerve conductivity. Had von Bezold probed the matter more deeply, he would have discovered that the powerful current employed by him *lowers excitability* as well as conductivity; and that a much weaker current—say, that from one small Grove's cell—*increases the conductivity* as well as the excitability. I show you a tracing which indicates the average result of numerous experiments performed by me regarding this interesting point in nerve physics. (See Fig. 13.) The three sets of

FIG. 13.

tracings (I, II, III) show the results of one of my experiments upon a frog's nerve. The lowest (I) was taken before the nerve was subjected to the influence of the continuous current. The distance between the origins of the curves (at o and s) indicates the velocity of the nerve energy. The middle tracings (II) indicate the velocity in the same tract of nerve when under the influence of the − pole of a current derived from one Grove's cell. The highest tracing (III) indicates the rate when the same portion of nerve was under the influence of the + pole of the same current. The interval between o and s is less in II, and greater in III, than it is in I; indicating that the − pole increases, while the + pole diminishes, the velocity of the nerve energy. I will make a drawing to enable you to understand how this experiment is performed. (Fig. 14.) The gastrocnemius (*m*) and sciatic nerve (*n*) are arranged on the machine in the

FIG. 14.

manner you have seen. Two pairs of wires (II and III), for irritating the nerve (see Fig. 9), are placed in contact with the nerve; and a third pair of wires (I), connected with a battery (one Grove's cell) for generating the continuous current, is placed in connexion with the nerve as indicated in the drawing. When I′ is made the + pole, a portion of the nerve between II and III is affected in the manner peculiar to that pole; while if I′ be the − pole, this tract of nerve is subjected to the influence of that pole. This you will readily understand from my last demonstration. (Lecture III.) 4th. Marey has shown that curara diminishes, while strychnine increases, the velocity of transmission in motor nerves. Without doubt many other toxic substances exert an influence, but this interesting subject has as yet received little attention.

The power of a nerve to conduct its energy we may appropriately term its *conductivity*. When the nerve energy travels along the nerve with unusual speed, we may say that the conductivity is increased; and, in like manner, when the energy travels slower than usual, we may say that the conductivity is diminished. Having explained to you the significance of this term, you will readily follow me when I start this interesting question, Are the irritability and conductivity of a nerve always similarly affected?—in other words, if the irritability of a nerve be increased, will the conductivity of a nerve be increased too? and so on. If von Bezold's researches, to which I have alluded, were correct, then a negative answer must be returned to this question. But these researches are, as we have seen, misleading. Electricity, temperature, deficient nutrition, all affect nerve conductivity in the same way as they affect nerve excitability. Further investigation is needed ere we decide as to whether these properties of a nerve are always similarly affected. I believe we shall find that it is so. Such a result would simplify our ideas regarding this recondite subject. This interesting point is worthy of your attention. I shall open my next demonstration with something more about nerve conductivity.

A Sketch
OF THE
INFLUENCES EXERCISED BY THE STATE OF HEALTH, PAST AND PRESENT, ON THE PRODUCTION AND COURSE OF DISEASE.

Excerpt from the Lectures on General Pathology delivered at University College, London,

BY W. H. WALSHE, M.D.,
LATE PROFESSOR OF MEDICINE AND OF CLINICAL MEDICINE, ETC.

(*Concluded from p.* 261.)

III. ACTUAL DISEASE EXISTS OR HAS EXISTED.—Under this our third chief head lies the main interest of the subject.

(*A*) First, a past disease may cause, or increase the tendency to, a fresh disease; and under these circumstances the first and subsequent diseases may be the same, or they may be different.

When any given disease reappears in the same person, after the time for so-called *relapse* has passed, it is said to *recur*. Now, such "recurrence" may be (1) part and parcel of our notion of the disease in its complete and perfect evolution—a sort of necessity of its being. Epilepsy and genuine dynamic asthma offer examples; for though instances are to be found recorded of single attacks in a lifetime of each of these complaints, their authenticity it seems to me may reasonably be doubted; and at all events, if real, such cases unquestionably must take a leading place amongst the *mirabilia* of clinical practice. But conceding, you may say, that recurrence *is* a part of these affections, how is it to be understood that past seizures not only stand as the predecessors, but act as the promoters, of new seizures? It seems to me difficult to doubt that in one and the other case the series of nervo-dynamic disturbances concerned, having been once gone through, is more easily reproduced; the part has been, as it were, rehearsed, and it is more easily played. How else can we account for the fact, that in proportion as attacks are repeated they are more easily excited?—that a cause at first insufficient to disturb the nervous equilibrium to the length of creating an attack, by-and-by does this with facility? Thus, too, I would, in part at least, explain the fact in the natural history of epilepsy, that, "as the disease continues, the tendency is for the attacks to increase rather than to diminish in frequency."*

The same sort of influence may be traced in cases (2) where recurrence, though frequent, cannot be held essential to our idea of the perfected disease: it is felt, I think, for example, in hysteria and gout. True, you may urge, a man gets a second attack of gout, not because he has had a first one, but because, untaught by the past, he continues to imbibe beer, Burgundy, and port, eats portentous rations of nitrogenous food, and takes no exercise. So he does, I question not for a moment, as a rule; but sometimes the

* Reynolds's Epilepsy, p. 162. 1861.

very slightest deviation from a standard and fixed regimen will suffice, in the case of a previous sufferer, to stir the disease into activity, and induce a *fresh* attack, which would have proved wholly impotent to *originate* the complaint. Is there not something in these cases assimilable to hereditary influence? and may not one attack be looked upon as the actual or potential parent of others?

In a third class of cases (3) recurrence is not clearly a part of the completed disease, yet a first attack is often followed by others without the intervention of the original and intelligibly efficient (it may be specific) cause. To me the power of the impress left on the system by a first attack, for instance, of chorea or of laryngismus stridulus, in promoting subsequent seizures seems a proven fact, as far as such a form of fact is capable of demonstration. But if you choose to doubt this, as perhaps you will, what say you of the case of ague? Once ague has been produced by its specific cause, paludal poison, recurring seizures may take place wholly independently of malarial influence of any kind. Emotional excitement, fatigue, slight intemperance, and a host of other influences, utterly powerless as *originators* of intermittent fever, suffice to cause its *reappearance*. Nay, further, may we not reasonably regard one paroxysm as in a certain sort the cause of another or of others? What is the idea of breaking the habit of having a paroxysm but an admission of the reality of such mode of causation. We had a man with tertian ague some time ago in the wards who was in the habit of returning to his bed every second day at 11 A.M. to "have his fit." A shrewd old nurse took upon herself to keep him out of bed, and occupy his mind one morning, when the paroxysm was due; he escaped that morning, and the fits never returned.

Lastly, there are affections in which (4) recurrence is most positively not a necessary element of complete evolution. Acute rheumatism may be cited as exemplifying this class of diseases. The frequent recurrence of acute rheumatism in the same person seems to me only explicable on the supposition that some perverted condition of blood and tissue has been left behind by any given attack which makes the system the easier prey of the directly exciting cause of others. Erysipelas is another example of the same kind. And the readiness with which some people have attack after attack of pneumonia seems a further illustration. It may, no doubt, be said that in all such cases the tendency to repetition depends on some physiological defect of the individual born with him, and assimilable to peculiarity of feature, of form, or of mind; but there will always remain in support of the other view the indubitable truth that each recurrence makes another recurrence producible by a less amount of cause than its predecessors. Number and facility of production of attacks increase in a sort of uniform ratio.

(*b*) Secondly, a past disease of one kind is said to be the possible efficient cause of disease of another kind.* Thus typhoid fever has been said by Louis to pave the way for tuberculous disease of the lungs,—hypothetically assigning, as the immediate cause, the prolonged pyrexia of the typhoid affection. There can be no doubt that some persons, demonstrably sound in all respects before the occurrence of the fever, have scarce imperfectly recovered from this, before pulmonary mischief, culminating in destruction of tissue, and associated with local and general symptoms identical with those of phthisis, sets in. I have witnessed this in my own practice, both public and private. But the query is whether the destroying material in the lung is genuinely tuberculous, or composed of aplastic exudation-matter of "typhoid" type, and more or less closely identical with that poured into the areolar tissue beneath the patches of Peyer. Besides, we must not forget the intense difficulty (which we have often experienced in the wards together) of affirming with surety whether a given pyrexial case is one of typhoid fever or of acute pulmonary tuberculisation. That cases of the latter kind have actually been described as examples of the former is certain. It is probable the form of association contended for by Louis between typhoid fever and true tubercular phthisis, is a reality; but the examples of its occurrence are as probably few and far between.

* No reference is of course intended here to secondary affections more or less necessary parts of a completed evolution of a primary disease. So-called "Bright's disease," following on scarlatina, would not be entitled, for instance, to be considered under the present head.

Syphilis, when become a diathetic vice—that is, in its secondary and tertiary periods,—has been held to promote the occurrence of, nay, unaided to cause, phthisis. I have seen somewhere—where I cannot at this moment recall—an attempt to prove the connexion numerically. But I well remember that this attempt went no further than showing that many persons who had had syphilis eventually became phthisical! And I know that the etiological doctrine came into vogue at a time when very little, if anything, was practically known of the power of tertiary syphilis to destroy the lung by specific infiltration of its own kind. The alleged relationship requires, I consequently think, to be submitted to closer investigation than it has yet received before we accept it as a fact.

Again, syphilis has been said to act as the direct cause of cancer. In answer to queries sent round to the medical practitioners of France many years ago by M. Le Roy, one out of every five cases of cancer was ascribed to syphilis. This, also, seems to me a view open to revision. If syphilis be really so potent in generating cancer, how comes it that, as authoritatively shown by Parent Duchâtelet, prostitutes prove but little prone to cancer of the very organs that are the first recipients of the poison?

Another illustration is found in the production of phthisis by diabetes; but I scarcely know if this can be considered a perfectly just one. For, in truth, there seems in some obscure way a connexion in the chemistry of phthisis and of diabetes, tending to prove that the pair cannot be looked on as wholly different diseases. Sugar exists in the blood to an unnatural extent in the early stages of phthisis, and its appearance in the urine is an occasional clinical fact. Possibly the two affections may be linked together through irritation and perverted function of the vagus nerve.

(*B*) *A new disease cures an old one.* — (1) Instances of this form of influence may be quoted where the cure is permanent or only temporary. The first kind of effect is exemplified by the cure of neuralgia of the fifth pair by erysipelas of the face, and by the rapid and unexpected termination of lupus with hypertrophy under the same influence.* Temporary cure is shown by the total disappearance of sugar from the urine, in even the worst form of hereditary diabetes, during the course of typhoid fever; of this we have had a remarkable example in the wards. Carbuncle, too, has been known to put a stop to diabetes. Insane patients have lost their insanity, passingly, during an attack of Asiatic cholera. An attack of small-pox will, *pro tempore*, and for a short while after its own convalescence, absolutely remove inveterate psoriasis of years' duration, leaving the skin perfectly smooth and free from scaliness. This singular influence of diseases on each other we have also seen exemplified in the hospital.

(2) The extension and aggravation of an old disease may relieve the secondary effects of that disease: whence the paradoxical truth, that a patient may be clinically in a better state because anatomically in a worse one. Here is an illustration: A woman with cancer of the uterus began to suffer from diminished flow, eventually suppression, of urine; anasarca rapidly set in, followed by uræmic coma. Death seemed imminent. At this juncture, sudden relief of all these symptoms, with copious flow of urine, occurred. Both ureters had been blocked up with cancerous matter; and (as subsequently shown post mortem) relief was afforded by the extensive spreading of deep ulceration, whereby a passage had been opened above the site of the obstruction.

(*C*) *The cure of an old disease may induce a new one*, whether the first be an *artificial* or a *natural* morbid state. Thus blisters, issues, or setons, long kept open, become a condition of artificial disease to which the economy grows familiarised, and which cannot be removed without ill-effects ensuing, either in the form of a return or increased severity of that for which they were originally employed, or of some ailment wholly new.

Illustrations may easily be found of the evil arising from the cure of *natural* diseases. Thus the cure of an ulcer in the small intestine in the course of phthisis has been known to cut short life at once through fatal obstruction of the bowel; for the contraction, inseparable from the healing process of such ulcers, will sometimes go further than desirable, and gravely reduce the calibre of the intestine. Whether this has ever occurred as the ultimate term of cure

* Cazenave: Diseases of the Skin (Eng. trans.), p. 255.

in typhoid ulcers is more than I know. I have not seen it. I believe I have observed very great aggravation of symptoms in two instances of enormous "simple chronic ulcer" of the stomach at a time when the ulcer, as appeared from post-mortem examination, must have been undergoing cicatrisation. In one of these instances the annular contraction of the exudative cicatrising material had given a sort of hour-glass shape to the stomach, and evidently the ingesta must have had notable difficulty in making their way from the cardiac to the pyloric side of the constricting band. Better far for the patient had Nature left the ulcer unhealed. Again, death has been produced in chronic dysentery and in anomalous chronic ulceration of the rectum by the curative process of ragged ulcers going too far, and leading to a complete internal block.

In these instances Nature is the curer; the physician is no more responsible for the evil than commendable for the good of the healing process. But there are diseases which it is said to be dangerous to cure, the faculty of curing them being within our reach. Chronic skin diseases take place in this list; but I cannot help thinking the question is not altogether settled. Persons who have no bias one way or other will find, I think, as I have done, that (1) the most serious and old-established skin diseases have sometimes been cured without ill results of any kind; (2) the cure of similar affections, when slight and but recently developed, has been followed (so closely that the connexion of cause and effect seemed hardly deniable) by more or less grave illness. There must be then a *tertium quid* beyond the disease and the cure, bringing about the one or the other result, and what that *tertium quid* is remains to be discovered.

The removal of hæmorrhoids which, at the moment, may save life, and once more make that life enjoyable to a chronic sufferer, may nevertheless do grave ulterior mischief in persons disposed to internal congestions, cerebral and other. And this danger will arise just in the direct ratio of the local and general good done by the removal. The greater the exhaustion from bygone pain and draining hæmorrhage the readier the rebound, the more active the renewed blood formation, and the greater the proneness to visceral stagnation.

The propriety of operating for fistula in ano in cases of phthisis has long been matter of dispute. Your Professor of Clinical Surgery decides that "where the *symptoms* of tubercular disease are present, the operation for fistula is not allowable."* His objection seems essentially to hinge upon the difficulty of getting the new wound to heal. But suppose there are no very decisive *symptoms* present; suppose the pulmonary affection is marked by physical signs alone; suppose the general health is as yet but slightly impaired, and the wound from the operation prepared to heal readily, what then will be the effect of its performance on the lung disease? Sometimes none of a well-defined kind; sometimes, on the contrary, an advance in area and stage of the physical signs, and a development of local chest symptoms hitherto unfelt. Obviously here the cure of one affection has, in some mysterious way, not created, but given activity to another.

(*D*) *An old disease may prevent a new disease.* — A disease may either (*a*) prevent its like, or (*b*) one kind of disease may prevent the occurrence of another kind.

(*a*) Under this category of like preventing like are to be ranked diseases one of whose characters is that a first attack confers immunity from a second. We may begin by enumerating them as—variola, scarlet fever, measles, yellow fever, Aleppo evil, whooping-cough, true plastic croup, varicella, vaccinia, syphilis, typhoid fever, plague. But the amount and surety of immunity vary greatly with these different affections.

(1) As a rule, to which there are but few exceptions, this form of immunity is one of the distinctive characters of diseases transmissible by inoculation, contagion, or infection. (2) The immunity is not absolute in regard of any one of them. Even yellow fever may recur in the same individual: in a collection of 27,000 cases there were found thirteen examples of double attack;† and it must be taken into consideration that a goodly proportion of those thousands of persons had never again been exposed to the causes of the disease. And though the most advanced natural historians of syphilis of the present day endeavour to prove that one effective inoculation is absolutely protective against any other, still a genuine second indurated chancre has been observed. Certainly, if the second sore be contracted within any short period after the first, its course is commonly much modified. (3) The immunity conferred by a first attack may be limited to part only of its anatomical elements: thus parents who have had scarlet fever in infancy may, on the occurrence of the disease in their children, have a form of specific febrile sore-throat without the cutaneous rash. (4) The duration of the immunity varies; it may subsist for a lifetime, last a period computed at about seven years (vaccinia), or in some epidemics endure for a short while only. (5) Diseases of this class are not often seen in old age; for, if susceptibility to suffer from the special poison exist in an individual, it exercises its influence in youth, and thus protects him subsequently.

(*b*) One kind of disease prevents the development of another kind—the class of mutually repulsive, incompatible, or antagonistic diseases. The number of diseases exercising this form of influence on each other, either as matter of demonstration or of probability, is very considerable. A few examples must suffice for the present.

Chronic diseases, as a class, *if in activity*, antagonise continued fever and cholera. Long since it was shown by Esquirol that epileptics suffer in small proportion and with slight severity from typhus, when exposed to the same exciting causes as healthy persons. Acute diseases antagonise typhoid fever: Louis has shown that typhoid fever never originates in the course of any acute affection. Ague and the paludal cachexia (as first shown in 1812 by Dr. Wells) almost completely prevent the development of continued fever and of phthisis; they enable the body, too, to resist more effectually the effects of alcoholism. Heart diseases with cyanotic tendency, aneurism, and cancer antagonise tuberculous disease. Acute gout and acute articular rheumatism are incompatible; as are likewise the specific pyrexial skin diseases.*

But it is doubtful whether this incompatibility is ever absolute. Thus, I have several times seen cancer and tubercle in the same organ: it is alleged both may form within the area of one and the same tumour; but cancerous substance, infiltrated with granular fat, looks very like tubercle, and probably has been mistaken for it. Again, you have seen in this hospital variola and scarlatina advancing together on one and the same skin.

In estimating the reality of alleged repulsion, the question of age is never to be lost sight of. Thus, the age at which aneurism becomes common is past that at which tubercle is of frequent occurrence. This alone is a reason why the two should not often be found together.

(*E*) *A past disease modifies a new disease.*—A given disease having existed influences the mode of appearance, the course, and the sequelæ of some other disease, for a season, or for a lifetime. The two diseases under these circumstances may be (*a*) the same absolutely in nature; (*b*) essentially but not absolutely the same; (*c*) different.

(*a*) The first variety may be illustrated by the effects of the virus of syphilis. A successful inoculation having once taken place and a true indurated chancre having followed, the production of a similar sore under the influence of new inoculation is held to be almost impossible, and the power to generate effective virus by any subsequent inoculation is believed to be lost. Any subsequent disease produced is therefore modified in course and in constitutional influence; and may be spoken of as *syphiloid* disease, rather than syphilis.

(*b*) The second variety is exemplified by the physical modifications occurring in a second attack of certain complaints as a consequence of anatomical changes left by a first. Thus in a second attack of acute pericarditis, if complete agglutination of the two laminæ of the sac has been effected by the first, or even if there be close general adhesion, the stages of the disease cannot be fully evolved:

* Diseases of the Rectum, by R. Quain, p. 118.
† Association Journal, Sept. 1854.

* Mr. Ambrose Blacklock, surgeon-major of the Madras Army, believes "that persons who have had well-marked cow-pox at no distant period, say within five years, are fully protected from Asiatic cholera, as well as from small-pox." Again, he says that after twenty-three years' residence in India, "where vaccination makes but slow progress among the people, and pock-pitted persons are to be seen in abundance, and where I have had a large number of cholera cases to attend to from year to year, I cannot remember ever having seen or heard of any person marked by pits of small-pox being affected with Asiatic cholera."

effusion of serosity becomes physically impossible. And this is not a mere matter of anatomical interest; for very certainly copious effusion may not only *per se* imperil, but actually destroy, life, through mechanical interference with the heart's action. From this point of view, any subsequent attack of pericarditis may prove less threatening to life than the original one.

(*c*) The influence exercised by vaccinia on the progress of variola, converting a well-defined disease into one of less complete evolution and of less certain course, illustrates our third variety,—the two viruses, whatever may be the eventually accepted theory as to the original relationship, being, at the period intended in our argument, wholly different.

(*f*) *Diathetic states influence intercurrent diseases.*—Every day's clinical practice exemplifies the reality of this influence: as a ready exemplification look at the variety of forms assumed by bronchitis under the influence of the diathetic complaint with which it chances to be associated.

But suppose a grave diathetic affection has existed a longer or a shorter time in a person seized with an acute specific disease, what comes of the collision (if I may use the word) of the two blood-poisons, that of intrinsic origin worked out by the diathesis, and the extrinsic one derived from without? That the newly arriving acute specific disease may seriously modify the old-standing diathetic complaint, we have already seen proved by the actual cure of saccharine diabetes for the time being under the influence of typhoid fever. Hence the acute specific disease proves the more powerful. But is this always so? May not the converse action be possible, and the diathetic state stamp in some fashion its modifying impress on the acute specific disease? From this point of view three forms of influence seem *à priori* conceivable. First, the diathetic blood state may render the individual proof against the extrinsic poison, just as vaccinia protects from variola. Secondly, it may leave wholly unchanged the receptive and zymotic faculty of the individual in regard of that poison. Thirdly, it may modify the course and symptomatic evolution of the acute specific disease.

Now, as far as my observation goes, the third and last form of influence is that which is really developed. We had a very remarkable illustration of the modifying influence exercised by the diathesis of Bright's disease on the symptomatology of typhoid fever under observation at the hospital some while since; but as we had a clinical conference on the subject at the time,* we need not now pass in review the series of slight, but distinct, aberrations from the standard type noticed in the symptoms of the typhoid fever.

A LUNATIC ASYLUM DURING THE SIEGE OF PARIS.

Addressed to DR. FORBES WINSLOW.

BY BRIERRE DE BOISMONT, M.D.

AT your request, my dear *confrère*, I propose to give you a short account of my sufferings, as well as those of the patients under my care, during the recent siege of Paris; and I do this the more willingly as you have for so many years given me such abundant proofs of your friendship and devotion.

I take, as an example, the state of my own asylum, as it will illustrate, on a small scale, the painful scenes of a family life in a *maison de santé* during the siege. The house in which I reside, and which is under my management, is situated at the further end of the Faubourg St. Antoine, and embraces an extent of 12,000 metres. It is composed of gardens and scattered buildings; the cellars are large, well vaulted, and resemble casemates. Formerly, State prisoners were confined here; and it was from this house that General Mallet, who for some hours put the power of Napoleon I. in jeopardy, fled on Oct. 22nd, 1812.

Without attaching undue importance to the opinions of persons who pretended to be well informed as to the supply of food in the city, I immediately purchased the provisions necessary to sustain the establishment for several months. Speculation in the necessaries of life considerably enhanced their prices; fuel of all kinds, and many other articles, could scarcely be procured. In the early part of October the supply of milk ceased. Those who know Paris will readily believe the privations my patients suffered from the absence of *café au lait*, this beverage being one of the principal items of the breakfast table.

One of the events of the siege which I had anticipated occurred, and greatly increased my anxiety. The military engineers intimated to me that my sister's house for convalescents at St. Maude would in all probability have to be destroyed for the defence of the capital. The Minister of the Interior officially informed my daughter, Madame Bivet, of this fact, and requested her to transfer her patients (sixty-two in number), with her attendants and officials, to Paris. This raised the number of patients in my asylum to 200.

Towards the middle of October an egg was worth a franc; chickens and ducks from twenty to thirty francs; geese from sixty to seventy francs. In the last days of the siege eggs were sold at two francs and a half each. Fowls were hardly procurable at any price. In order to be prepared for this difficulty I purchased 80 laying hens and about 100 pigeons to supply the wants of the weak and delicate invalids in the asylum. In the latter part of October the pork-butchers' shops were closed, and fresh pork, bacon, &c., were not to be had.

The butchers' stalls, governed by municipal authority, now substituted horseflesh for beef, mutton, and veal. The quantity allotted to each individual became really insufficient. During the last month of the siege thirty grammes per diem were allotted to each person. Consequences of a very grave nature would certainly have ensued from this insufficient supply of nourishment had not my constant care for my patients impelled me to search for food in places where I thought it might be concealed. I was thus (with the addition of some of my own which I was compelled to kill) furnished with horses and mules during the continuance of the siege, so that, with the exception of two days, my inmates were supplied with this kind of meat.

In spite of all assurances to the contrary from official persons, the rationing of bread took place in January. At first it was made from thirty parts of flour mixed with vegetables, and very soon it was manufactured from badly sifted wheat, bran, oats, and rice. Among other ingredients of which it was made were portions of straw finely cut. On the 13th of January there was only to be had a blackish kind of bread, which when eaten spread itself upon the tongue like dust, and irritated the teeth. This food prevented my eating anything for two days, and caused me to suffer extreme vertigo.

Living on horseflesh, and being deprived of milk, fish, vegetables, &c., seriously affected the health of my patients, particularly a great number of my elderly ones, who died in a short time, but whose existence would have been prolonged had they been supplied with delicate food suitable for aged persons. In November and December the mortality among the patients was very great. Diarrhœa, dysentery, and the consequent exhaustion caused by these maladies and the want of food, caused many deaths, several of the patients dying in the course of one day. To counteract the ill effects of this diet I ordered the use of wine and cocoa, with which I was well supplied. Several of the patients refused to eat the bread, and some of them died just as a lamp burns out for want of oil. I procured a quantity of wheat in the husks, which I caused to be well boiled and seasoned, and this eaten together with horseflesh saved us from the pangs of hunger, from which so many others suffered at that time.

In this account I must not omit to refer to the difficulties I had to encounter in procuring fuel. In consequence of the deficiency of coal, wood, and coke, I was under the painful necessity of discontinuing the baths, and shutting up the stoves in order to enable me to have coals for the use of the kitchen. At a later period of the siege firewood was obtained by cutting down the trees in the Bois de Boulogne and Vincennes.

* *Medical Times and Gazette*, June and July, 1855: "Reciprocal Influence of Coexisting Diathetic and Acute Specific Diseases."

In my dire extremity I made an application to the Ministers of Commerce and Agriculture, and fully detailed to them the painful position in which I was placed. They were touched by my statement, and a small supply of coal was allotted to me, but only a sufficient quantity to be used in the kitchen. Notwithstanding my critical position, all my subsequent appeals to obtain a further supply of fuel were useless. During the frightful cold of November and December I was obliged to erect stoves in all the principal rooms and corridors of the asylum, but no wood could be procured from those who usually supplied it. Notwithstanding the supply obtained from the two woods to which I referred, in consequence of this absence of fuel I had to cut down twenty large trees in my own grounds. You can well understand, my dear friend, having beautiful trees of your own in the grounds attached to Hammersmith asylum, the anguish of mind this destruction caused me; for these trees, during the hot months of summer, formed a shady retreat for my patients.

It is impossible for me to describe to you all the miseries to which the siege subjected us. The defective supply of nutriment caused among my patients great emaciation, profound debility, disordered respiration, and sleeplessness, particularly among those of advanced age. Through want of food I was reduced to a state of great exhaustion (having lived for four months on horseflesh and horrible municipal bread), and many of my patients suffered in the same way. In this sad condition we continued until your packages of provisions so opportunely arrived from London, and the food thus obtained may be said to have been the means of saving my own life, as well as the lives of several of my patients.*

May an honourable peace (after which all sensible men aspire) repair our losses, and efface the remembrance of this horrible siege. I have in this short letter said nothing as to the effect of disordered moral emotions on the brain and mind. The mental disorders that occurred during this epoch were characterised, as in 1848, by great exaltation and depression; but the terrible despair that fixed itself on the imagination was much more marked than at the former convulsion. The insane had two things to contend with—viz., an intensely exalted imagination caused by morbid conditions of the brain, combined with the painful physical and mental sufferings consequent upon defective nourishment, and all the horrors accompanying the siege. What greatly intensified the state of my insane patients was their almost chronic condition of insomnia, the effects of the bombardment. Under these circumstances, it was almost useless for patients to retire to bed, for no continuity of sleep could be obtained. Every evening, at half-past ten, as if the enemy grudged a moment's repose, the bombardment commenced, and lasted without intermission until five o'clock in the morning. My poor patients were very much tormented by it, and great cries issued from a dormitory where thirty or more were huddled together in a state of great mental terror.

The lamentable effects of this war, and particularly of the siege of Paris, will, I fear, not soon pass away. Generations yet to come will be the sufferers from so terrible a calamity. The whole of society appears to be disorganised. Fathers, husbands, and sons have disappeared most mysteriously from the scene of life. Men of fortune have been ruined, and desolation and despair are everywhere to be met with. I pointed out in the *Union Médicale* in 1848 the sad effects of political revolutions on the mental health, but the cases then detailed will in amount be insignificant as compared with what this frightful social and political convulsion must eventually give rise to.

As to the effect of the siege on the general mortality of Paris, I will merely state that the death-rate rose from 1300 to 1400 (the ordinary weekly average) to 4670, for this number of persons died in Paris during the last week of the siege.

If things change, I purpose to send you a detailed account of the effects of this political crisis in the production of insanity.

Paris, February, 1871.

* The contents of these packages (which were despatched from London on the 1st, 4th, and 5th of February) were cheese, hams, tongues, preserved milk, venison, mutton and beef roasted, potatoes, tea, biscuits, Bath chaps, soup and bouilli, beef and vegetable stew.

ON THE USE OF THE ECRASEUR FOR THE REMOVAL OF NÆVOID GROWTHS.

BY JAMES F. WEST, F.R.C.S.,

SENIOR SURGEON TO THE QUEEN'S HOSPITAL, AND PROFESSOR OF ANATOMY IN QUEEN'S COLLEGE, BIRMINGHAM.

THE advantages of the écraseur for the removal of vascular and pendulous tumours had been known to me from practical experience for some years, having frequently by means of it taken away hæmorrhoids, uterine polypi, &c., with perfect success; but I had not employed it for the treatment of nævi, having generally been able to cure them by means of the ligature, the chloride-of-zinc paste, or the injection of the perchloride of iron, until I met with a case in which, the ligature failing entirely, I was induced to try the écraseur.

M. Chassaignac reports several cases of erectile tumour which he completely relieved with this instrument. One of the most remarkable he narrates is that of a venous erectile tumour as large as an egg, situate near the umbilicus in a child six months old, which he removed "sans l'effusion d'une seule goutte de sang" ("Traité de l'Ecrasement Lineaire," p. 527).

Since my first experiment with it answered perfectly, I have again employed it on many occasions; but a few typical cases will suffice to indicate its utility in many, if not in all, cases of nævoid or erectile tumours. I am far from saying that it should replace all the other methods which have hitherto been used for the removal of these growths. Each case must be treated on its own merits. Thus there are certain cases in which the setting up of adhesive inflammation, and the consequent obliteration of the vessels supplying them by the injection of the perchloride of iron, by vaccination, or the introduction of heated wires into them, may be advantageously employed. But this principle cannot be carried out in many nævi of the face, as a large, dense cicatrix is thereby produced, which is often very unsightly. The simple application of collodion, or of pressure by elastic pads, may cure in slight cases.

The destruction of nævi by caustics, again, is attended by uncertain results, and the consequent cicatrices are often deep and ugly, from the impossibility of our gauging the distance to which the caustics—as chloride of zinc, nitric acid, &c.—ought to penetrate the tissues.

The ablation of erectile tumours is probably the most perfectly reliable means of treatment, and this may be accomplished either by enucleation, the ligature, the knife, or the écraseur.

Piecemeal excision or enucleation is often attended with great loss of blood, even where the adjacent arterial trunks have been compressed as completely as possible; and the little patients who are the ordinary subjects of nævi bear hæmorrhage badly. A comparatively trifling loss often proves so serious to the patient that the attacking of large subcutaneous nævi by this process would hardly be justifiable.

The same difficulty meets us in the use of the knife; and I cannot doubt that the older surgeons were just in laying it down as a rule that, in removing nævi, it was always proper to cut wide of the tumour, and on no account to cut into its mass.

The introduction of either hare-lip pins or of ligatures frequently fails to cure; the latter are especially unreliable with venous nævi of large size, owing to their becoming loose, even though the skin around the growths may not have been included in them. The parts daily diminish in size, so that ligatures have to be again and again applied to ensure the entire destruction of the tumour. Moreover, ligatures often set up troublesome ulceration at the base of the nævi, from which occasionally severe hæmorrhage takes place.

The advantages which, in my experience, the écraseur offers are, that hæmorrhage is avoided—an important element in all operations, but particularly so with children, and that you have a linear cicatrix and a comparatively small wound; and thereby prevent or diminish the deformity which, by other operative procedures, will almost

of necessity be produced. Chassaignac, also, claims for it that less inflammatory action and less suppuration attend its use than that of the knife; and, consequently, that the wounds resulting therefrom heal more readily, and are less likely to be followed by pyæmia. On these latter points I will not now offer an opinion; but as to the smallness of the resulting cicatrix—a great desideratum in all operations about the face,—and as to the freedom from hæmorrhage, even when dealing with large growths of this kind, I am quite decided.

CASE 1.—MRS. L——'s child, aged seven months, had a purple subcutaneous nævus, as broad as a crown-piece, on the left side of the head, which, when filled with blood, was elevated to the size of a large walnut. Pressure with elastic pad had been tried, but without success, when Dr. Suffield, the ordinary medical attendant, asked me to see the case. I ligatured the tumour in four segments on Nov. 11th, 1868; but, owing to the ligatures becoming loose, very little reduction in the size of the tumour took place. On the 18th I encircled the base of the nævus with a ligature. On the 22nd I introduced two strong pieces of whipcord through the centre of the tumour, and tied it in two segments. These also became slack; and very little benefit having been obtained, I resolved on using the écraseur. Having first passed two hare-lip pins through the base of the tumour, I applied the chain of the écraseur below them, and, gradually working the handle of the instrument every twenty seconds, succeeded in removing the whole mass, which was as large as a walnut, in the course of fifteen minutes. No bleeding of consequence occurred, the wound healed up rapidly, and a very small cicatrix, which was perfectly free from all trace of nævoid tissue, resulted.

CASE 2.—Elizabeth L——, aged forty-seven, was admitted into the Queen's Hospital on April 26th, 1869, with a dark pigmentary nævus on the right cheek which had existed from birth, but had recently increased greatly in size, and which reached from the outer canthus to the angle of the jaw, and measured two inches and a half in length by one in breadth. I removed it with the écraseur the same day, first making an incision through the skin around the tumour to the depth of a quarter of an inch, in which the chain of the instrument might lie. This procedure facilitates the operation, as the écraseur, though it freely divides mucous membrane, rather tends to tear the integument, and is at any rate some time in cutting through it. Three silver sutures were introduced after the operation. These were taken out on May the 1st, and two days after, the wound being perfectly healed, she went home, having a very small linear scar on her cheek.

CASE 3.—Mrs. B——, of Bromsgrove, came to me with a strawberry-like pigmentary nævus as large as a chestnut on the left cheek, just below the zygoma. Dr. Mackay, Professor of Materia Medica in Queen's College, gave chloroform, and I applied the écraseur, first making a slight incision in the skin around the tumour as in the former case. Scarcely any blood was lost by either patient. Three silver sutures were introduced, which were taken out on the fourth day, and on the seventh day after the operation she was able to return home. This growth also had existed from birth as a mole, but had lately developed greatly and become very vascular and sensitive. The cicatrix which resulted was linear, and was so slight that when she presented herself in my consulting room a few months after, I did not at first distinguish it at all.

Birmingham, February, 1871.

A CASE OF

TETANUS SUCCESSFULLY TREATED BY THE HYDRATE OF CHLORAL.

BY A. G. LAWRENCE, M.D.

MRS. A—— had been under my care for the past two years, suffering from myelitis, and had derived considerable benefit from rest, support, counter-irritation, and tonics, with the iodide of potassium, leaving her with partial disuse of the lower extremities. On Dec. 28th, the day being bright and sunny, she went for a drive, and expressed herself as better than she had been for a couple of years. While undressing, the same evening, her maid allowed her to fall into the sitting position, which produced acute pain up the spine into the back of the head. She passed a very wakeful night, complaining of stiffness in the jaws, which continued all through the next day, and for which I prescribed two blisters, of the size of a shilling, to be placed over the articulation of the lower jaw; also a mixture of the iodide of potassium and aromatic spirit of ammonia in an infusion of gentian, three times daily; hoping that entire rest in bed, with quietude, would overcome the untoward symptoms. However, early on the morning of the 30th I was summoned to my patient, and was told she had passed a very restless night, and had not slept till 6 A.M., and awoke at 6.30 with her jaws firmly fixed and unable to open her mouth in the slightest degree. She complained of great stiffness and pain in the neck and jaws, accompanied with sharp spasm. The muscles of the back and legs were also rigid, the spasms never entirely ceasing, but being aggravated every quarter of an hour, and then partially subsiding. There was no hardness or rigidity of the muscles of the abdomen. Her voice was husky; she had the greatest difficulty in swallowing, and the saliva trickled down her chin. She had a careworn expression and anxious, painful smile. The sensibility of the skin was so much diminished that she did not feel the effect of the blisters which had been placed on the jaws the night before, and which had risen considerably. I immediately ordered three drachms of Ferris & Co.'s syrup of chloral hydrate in half an ounce of water every three hours, and, should the spasms relax, as much beef-tea and milk to be given as she could take. Half an hour after the first draught a feeling of glow had come all over the body, and, from being exceedingly cold, she became quite warm; the tonic spasm of jaw and legs began to subside, and she was able to open her mouth sufficiently to admit the handle of a teaspoon, and could with difficulty swallow a little beef-tea, though the act immediately excited spasm. After the second dose the pain and spasm in the legs and jaw were much lessened, and she was able to open her mouth sufficiently to admit the end of a pencil-case; but no sleep was produced, although a calming influence had set in. After the third dose the spasm and pain subsided, so as to allow the mouth to be opened wide enough to admit a teaspoon, and beef-tea and egg-flip were constantly given.

Dec. 31st.—I found my patient had slept all night; the spasm and pain in jaws and legs had entirely gone; she was able to swallow well without producing spasm, and only complained of great soreness of the muscles of mastication and of the lower extremities; she was, however, quite unable to use the former. Has had one dose of chloral this morning, which is to be repeated at bedtime.

My patient continued to improve till Jan. 3rd, four days after, when, in having her bed made, the maid wrenched her back, which in one hour brought on all the former symptoms in an acute form. The chloral was again administered every three hours, and after the second dose the tonic tetanic symptoms once more entirely subsided.

The point of greatest interest in this case, next to the favourable influence of the chloral, is the production by shock directly affecting the spinal cord of the train of tetanic symptoms which are commonly due to traumatic peripheral irritation. This, no doubt, is to be accounted for by the antecedent myelitis. My patient has continued to improve under a tonic treatment, with chloral only at bedtime, which she describes as producing a most pleasant feeling, and in half an hour after taking it a warmth comes, first in the hands and arms, then in the feet, and in three-quarters of an hour it produces an uninterrupted sleep of two hours. She then awakes to change her position, and falls asleep again, arousing in the morning very much refreshed, free from headache, sickness, or other uncomfortable feeling, and says that she would like to live constantly under its influence. I have tried in her case every anodyne in the Pharmacopœia, all of which deranged the system so much that I abandoned their use; but the chloral has admirably answered my purpose in procuring for my patient a good night's rest without any drawbacks.

Chepstow, Jan. 1871.

WE understand the Admiralty intend transforming two sailing corvettes into hospitals, one to be stationed at Kingston and the other at Queenstown, for the reception of patients suffering from infectious diseases.

ON THE RADICAL CURE OF HERNIA.

BY A. VANS BEST, M.D., F.R.C.S.,
LATE SURGEON, BENGAL ARMY.

UP to the present time, so far as I am aware, seven operations have been suggested for the radical cure of reducible inguinal hernia, all having the same object—the obliteration by plastic material of the aperture of exit.

The very simple operation (even more simple than that of Mr. Redfern Davies) I now recommend requires neither the invagination of the parts nor the use of plugs or buttons, whether of india-rubber or split shot. The steps of the operation are these:—

I use a rather long-handled flat nævus or hæmorrhoid needle, well bent (quite a semicircle from shoulder to tip of 1½ in. diameter), not too wide, and sharpened on both sides from one-third of an inch from the point. A fine hole is drilled for the passage of the ligature, a quarter of an inch from the point. This needle, with a plain dissecting forceps and strong salmon-gut, is all that is required for the operation.

In the first place, chloroform must be fully administered, the hernia reduced, and the thigh adducted and flexed. The finger, as usual, is introduced *quite within the internal ring*, carrying the integument in front of it up the canal, while the assistant draws the skin of the abdomen firmly over towards the opposite groin. The threaded needle is then passed close to the finger, a small piece of wax having been moulded on its point (instead of a canula); the handle of the needle is raised, and the point pushed through the internal pillar and the abdominal parietes close within the internal ring. The portion of gut on the convex side of the needle is seized by the forceps of the assistant, and the needle, still threaded, withdrawn through all the structures except the temporarily invaginated skin. The finger being carefully maintained *in situ*, the gut on the concave surface of the needle is slightly pulled by the assistant, while that already seized is firmly held; this facilitates the turning of the needle and transfixion of the outer pillar (Poupart's ligament). This being accomplished, the skin of the abdomen is drawn towards the crest of the ilium, and the needle passed through the original aperture, unthreaded, and the finger and it withdrawn. We have, therefore, one scrotal and one abdominal aperture—the latter directly above the aperture of exit of the hernia. Nothing now remains but to tie firmly home the two ends of the salmon-gut, cut it short, and let it drop into the wound. A pad and spica bandage are applied, a dose of opium is given, and the patient kept in bed until the parts are well matted together. The knot of salmon-gut will either become encysted or come away, it matters little which; in either case the approximation of the pillars is certain. It is satisfactory to the operator that the assistant should pass his finger up to the internal ring, when he can distinctly feel it grasped as the ligature is tightened. It is absolutely necessary that the salmon-gut should be soaked in warm water for five minutes before being used, and that long round threads should be selected. The needle should be threaded from the concave side.

I have at present performed this operation only three times—twice with complete success. The unsuccessful case occurred in the European General Hospital in Calcutta, where the patient, a sailor, leaped over several beds within a week after the operation, and reproduced the hernia.

I would suggest that this operation should be employed when a very large ring exists, so that its space might be diminished, and that the protrusion might thus be brought under command of an ordinary truss.

In the three cases on which I have operated I have had no hæmorrhage. One was to all appearance a direct, the others examples of external, inguinal hernia. I give a short summary of my last case.

In consultation with Dr. Pirrie, we agreed that the following was a suitable case for the operation.

R. M——, aged twenty-three, of a nervous and restless temperament, had suffered from reducible right oblique inguinal hernia, of the size of a hen's egg, for three years, accompanied by a small hydrocele. He was exceedingly anxious to have the hernia permanently cured. As he did not pay much attention to the adaptation of his truss, the hernia was gradually increasing in size. At his request I operated (and chose the manner described above) on the 3rd of November, at 3 P.M. He had a grain of opium at once, which was repeated by my orders at 9 P.M., and a little cold beef-tea when desired.

Nov. 4th.—Good night; slight tenderness over the wound. —9 P.M.: Passed water; general uneasiness, and some slight tenderness in right iliac region.

5th.—Took half an ounce of castor oil; pain towards right iliac region; testicle retracted. Oil operated slightly.

6th.—Wound dressed; purulent discharge, redness, and tenderness entirely local.—7 P.M.: Had an attack of colic, which was relieved by camphor and assafœtida pill.

Dec. 17th.—Not the least impulse on coughing; parts solid. Cured.

Aberdeen, February 17th, 1871.

ON A CASE OF INCISED WOUND OF THE WRIST,

FOLLOWED BY ANÆSTHESIA AND DIMINISHED TEMPERATURE IN THE HAND.

BY ALBERT A. GORE, M.D.,
STAFF SURGEON.

REGIMENTAL No. 1137, Thomas O——, Royal Artillery, twenty-nine years of age, was brought to the Garrison Hospital, Limerick, on the 16th of June, 1870, with a clean incised wound of the right wrist, about an inch and a half above the joint in its palmar aspect, and extending from the outer edge of the radius to the outer edge of the ulna, dividing the superficial tendons, and completely severing the radial artery. He lost a large quantity of blood before the artery was secured. After this was done, the edges of the wound were brought together by sutures, and a dressing of carbolic acid and oil on lint applied. By July 15th the wound had become quite healed; and he was discharged to his duty on the 18th of July. The accident was caused by a portion of broken basin falling upon his right forearm, and producing the injury just described.

On the 27th of January of the present year he was readmitted into hospital with the following symptoms:—The right hand, up to the lower margin of the cicatrix, was of a dusky-red colour, disappearing momentarily on pressure, and much colder than that of the opposite side. Immediately above the old wound the forearm was of the natural temperature. The power of firmly grasping anything was lost; sensation was almost lost on the whole of the palmar aspect, but existed to a limited extent in the little finger, and upon the back of the hand. The electro-magnetic current caused no contraction of the affected fingers, neither was it felt on the palmar surface, or anywhere below the cicatrix. Contrary to the condition of those cases described by Mr. Paget, and which I believe were not uncommon during the late American war, no burning or other particular sensation was complained of, and the symptoms were not aggravated by warmth.

On the 29th of January I examined the temperature of the affected hand, and found it to be 61° Fahr.; that of the left side 82°. On the 30th, the affected hand (having been kept wrapped up in cotton-wool and flannel during the previous night) was 63° Fahr., the other 90°, and the body 92°. The pulse was not detectable below the cicatrix of the former wound. After a short stay in hospital he was allowed to return to his duty as an officer's servant, with directions to report periodically at the hospital, keeping the hand in the meantime during the day in a warm glove, and at night well wrapped up in cotton-wool and flannel—the only treatment which, while in hospital, appeared to alleviate the symptoms. These last evidently resulted from injury to the nerves of the forearm, increased probably by diminished circulation in the hand. One other result of the diminished nervous influence in the affected part was, that a small wound on one of the fingers took a very considerable time to heal, only doing so after frequent stimulation and cauterisation.

Ordnance Barracks, Limerick, Feb. 4th, 1871.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MALE LOCK HOSPITAL.

CLINICAL RECORDS OF THE THERAPEUTIC VALUE OF IODINE IN THE TREATMENT OF SYPHILIS.

(From the Practice of Mr. BERKELEY HILL.)

ACCORDING to Mr. Berkeley Hill, it is of first importance, in considering the power of iodine to subdue syphilis, to determine the stage during which the drug is most serviceable, and what are the forms in which the disease betrays itself during that stage.

Iodine is, he says, unquestionably of high value in all the skin affections characterised by prominent or deeply-set tubercles in the skin, and those marked by ulceration rather than by desquamation. In the visceral forms of syphilis also, in periosteal and osteal affections, and in muscular tumours, the extreme value of iodine is beyond doubt. This indisputable effect of iodine in certain forms, and the prejudice against mercury, have led many practitioners to employ iodine for all the phenomena of syphilis. This Mr. Hill believes to be a mistake, for two reasons. The first: that he has never been able to trace any result from the exhibition of iodine either for the initial sore or for the roseolous and papulo-scaly eruptions on the skin. Undoubtedly, these symptoms may disappear while iodine is being taken; but it has not yet been shown that they do so with greater rapidity than when the patient is subjected to no specific treatment whatever. The second: that he is strongly convinced that the earlier the disease is controlled, the more likely is the patient to escape a tedious course and the dangerous sequelæ of syphilis. Consequently, he regards the iodine treatment of early syphilis as a loss of valuable time, and as an exposure of the patient to the chance of ultimate, and possibly avoidable, suffering. The converse is, however, unfortunately not always true: the best and most careful treatment of syphilis at the outset is not a perfect safeguard against a severe course of the malady. Nevertheless, every year increases his confidence in the protective value of a judicious early treatment.

Mr. Hill believes that iodine is generally given with advantage to feeble persons, whose eruption is pustular rather than bullar; but even here he thinks it possible that the stimulant effect of iodine is the chief benefit derived from the drug, and mercury should follow the iodine as soon as the restored vigour of the patient will allow; and if, in such cases, iodine alone is relied on, the disease commonly recurs in the same or some other form. Iodine, therefore, he considers useless in all initial sores, and in early scaling or muscular eruptions, but often serviceable as a preliminary to mercurial treatment for debilitated persons.

But even when unquestionably appropriate, it should always be followed by mercury. When the patient is apparently restored to health, he should at once begin a course of small doses of mercury, given continuously, or with occasional short intervals of iodine, and lasting four or even six months. The dose of mercury need not be sufficient to produce any soreness of the gums; slight sponginess is all that is needed. A fifth or a fourth of a grain of perchloride in the twenty-four hours, given with cinchona solution and hydrochloric acid, is very effectual. Ammonia should not be used in any form with the mercury, for it has been shown by Mr. Martindale, teacher of practical pharmacy and dispenser in University College Hospital, that the perchloride, when mixed with ammoniacal salts, is gradually but completely precipitated from solution as ammonio-chloride; hence, though this precipitate would be dissolved in the stomach and produce its proper effect, the chance of its remaining as sediment at the bottom of the bottle renders ammoniacal solutions of mercury uncertain and unfit for internal use. Simple distilled water dissolves the perchloride quite sufficiently for this purpose.

Iodine is also useful, when given after a mercurial course, to prolong the influence of mercury which has been given early in the disease. In such cases it will frequently control even scaly eruptions, which otherwise would be slow to subside. This effect has been attributed to the fact of the mercury, which has been deposited in the tissues, being redissolved into the circulating fluids.

The modes of giving iodine vary much with the individual. Small doses of two or three grains, three or four times daily, should be combined with some aromatic or astringent tincture or infusion to prevent the irritation of the alimentary canal that sometimes occurs. But these small doses soon lose their effect, and must be gradually increased by about one-third at successive steps. This rule holds good also for large doses. If a patient ceases to derive benefit from twenty grains, the increase should at once be made to thirty, for a smaller addition to the dose seldom has any effect. The augmentation should be continued until the disease has disappeared, or until symptoms of iodism show that no more can be borne. In the latter event the use of iodide should at once be discontinued for a short time, and subsequently resumed in some other form. For example, if iodide of potassium has been previously used, the sodic or ammoniac iodide should be tried, and that in half the former dose. Sometimes it happens, after taking long courses of iodide of potassium, that the stomach grows intolerant of the alkali, the tongue becomes white and furred, the stomach loathes food, and the syphilitic symptoms cease to show any abatement. This condition is often not comprehended by practitioners, who abandon the iodide (or are themselves abandoned by the patient), and take to mercury or some other drug, which in such a state of the alimentary canal can command no success. A dose of blue-pill and colocynth, with a few days' treatment with nitro-hydrochloric acid, and complete abstinence from alcoholic drink, will, however, speedily restore the appetite, clear the tongue, and render the patient again able to take the iodide. Mr. Hill has known a disordered stomach to make iodine inoperative, even when that drug had been taken for only a short time. In one case he was applied to by a medical man for advice about a very painful node on which iodide of potassium produced no effect. He found that the stomach was considerably deranged, and prescribed some simple remedy for its condition before making a further attempt with the iodide. Then, on the iodide being resumed, the patient was immediately relieved of the pain and swelling, which it had before failed to influence. Again, the use of iodine can sometimes be prolonged, after the system has tired of it, if combined with sarsaparilla, of which the most useful forms are, in Mr. Hill's opinion, the liquid extracts of Bell or Squire. One, two, or even three drachms should be given in half a pint of water, with the requisite dose of iodide, about midway between, or two hours after, meals. Ammonia very greatly assists the effect of iodide of potash in debilitated patients. It is a more valuable adjunct than the salts of iron even. Four or five grains of the sesquicarbonate may be added to the draught of iodide. Bromide of ammonium added to the iodide has apparently also a good effect in the nervous affections of syphilis. With regard to the form of iodide to be employed, the salts of potassium, sodium, and ammonium alone can be trusted to produce marked effects of iodine; but which of these is preferable Mr. Hill hesitates to decide. The taste of each of them is, perhaps, equally disagreeable; but the sodic and ammoniac forms, having smaller equivalents of alkali, furnish a larger amount of iodine, weight for weight, than the potassic. Empirically, he has not been able to detect any particular advantage in any one of these salts over the others. Either of them, if pushed too far, will produce iodism; and the same patient will at one time bear one better than another. He has not been able to detect any difference between the effects of these three salts, except that each is useful for ringing a change in cases where the use of iodine must be long continued.

The toxicological effects of iodine are various. That most commonly complained of is irritation of acne pustules in persons subject to that complaint. The appearance of

this symptom always indicates a short course of acids; so do the dry, red tongue so well described by Mr. L. Parker, coryza, and the other decided signs of iodism. Flat papules and flat pustules of the skin are so rarely produced that they should never be waited for as a sign that iodine has been pushed too far. Nevertheless, Mr. Hill has seen them produced on two occasions when very few grains of iodide had been taken. The subjects belonged to a rare class, which appears to be constitutionally unable to take iodine in any form.

HOSPITAL FOR WOMEN, SOHO-SQUARE.

CASES OF OVARIOTOMY.

THE following is the first portion of a brief record of all the cases of ovariotomy performed at this hospital during the latter part of 1870, for the notes of which we are indebted to Mr. W. Rigden, the house-physician.

CASE 1.—H. F——, aged twenty-three, single, was admitted under the care of Dr. Protheroe Smith, on the 19th of August, 1870. She had not menstruated since the end of the previous January, and had noticed that her abdomen became uniformly larger during the last four months.

On admission the abdomen was found to be equally distended, dull on percussion, except at right flank, presenting fluctuation throughout, more distinct at upper two-thirds; at lower third there was some solid matter. The urine was pale, and contained no albumen.

The operation was performed on August 20th, by Dr. Heywood Smith. The cyst was found to be extensively multilocular; the fluid which was drawn off was very thick and scanty; there were no adhesions; the cyst sprang from the right ovary. The pedicle, which was thin and short, was secured by Dr. H. Smith's clamp. The incision was closed with carbolic silk suture, and the wound dressed with carbolic acid.

The patient made a good recovery. Albumen appeared in the urine on the fourth day, but quickly disappeared. The sutures were removed on the third day; the wound looked very well, being united in its whole length. On the eleventh day the clamp was removed, the wound looking well. The patient was discharged well on the forty-second day.

On the 30th of January the following note was made:—The patient has been seen frequently since she left the hospital. She has continued quite well, except that at each period there exudes a slight sanguineous discharge from the part of the wound which corresponds to the insertion of the clamp. Between the periods the opening closes over.

CASE 2.—M. S——, aged twenty-six, five years married. Has had two children, the last three years ago. Admitted under Dr. Protheroe Smith, September 14th, 1870. She had noticed a swelling on left side of abdomen for two years. The abdomen was equally distended, dull on percussion, resonant at the flanks, with distinct fluctuation in all directions.

The operation was performed on Sept. 17th, by Dr. Heywood Smith. No difficulty occurred in the operation; the cyst was multilocular; there were no adhesions. The pedicle was secured by means of Mr. Spencer Wells's clamp. The wound was dressed with carbolic acid.

On the following day the pulse and the temperature began to rise. On the third day after the operation the abdomen was somewhat distended and tympanitic; the countenance much changed and sunken; pulse 124 to 130, smaller and weaker than before; the patient retched a little. By midday she was much worse. The pulse had become very rapid. The vomit consisted of dark "coffee-grounds" matter. The abdomen was much distended, and some oozing took place by the clamp. It was loosened, and on the pedicle being allowed to fall in, nearly two pints of serum escaped from the cavity. The patient died at 10 P.M.

The post-mortem examination disclosed diffuse peritonitis, with deposition of flakes of lymph on surface of intestine, and a small clot at the end of the pedicle.

Observations.—In reference to the first of these two cases, Dr. Heywood Smith observed that some solid matter had been diagnosed, and that the operation had disclosed a multilocular cyst; that when the secondary cysts are small and closely packed, especially in the lower part of a tumour, it is almost impossible to distinguish them from a more solid tissue. In the second case he said the patient sank from rapid peritonitis, in which the effusion was thrown out rapidly and in considerable quantities. He would draw attention to the fact that in the evening of the day after the operation the pulse and the temperature had begun to rise, and he regretted that he had not had recourse at once to venesection, instead of waiting till the following morning, when so great a change had passed over the patient that it was too late. The appearance of albumen in the urine, in the first case, four days after the operation, corroborated Dr. Protheroe Smith's observations upon congestion following the cutting off the outlet of the superfluous energy of the circulation. He would recommend the adoption of a plan he pursued for securing better apposition of the edges of the womb—viz., to draw with nitrate of silver or otherwise horizontal lines across the abdomen, so that the sutures could be passed through or between corresponding lines.

CASE 3.—E. G——, aged thirty, was admitted under Mr. Christopher Heath on September 2nd. She had been eleven years married; had never been pregnant; had always been regular; had been conscious of getting stouter for the last four years. Measurement on admission: girth at umbilicus, 35½ in.; from ensiform cartilage to umbilicus, 7 in.; from umbilicus to pubes, 8 in.

The operation was performed on Sept. 10th. Two cysts were found, containing clear limpid fluid; the right cyst, with the ovary, was brought out, some adhesions being divided with cautery clamp, and the right broad ligament was divided with the cautery clamp close to the uterus. Adhesions between the left cyst and rectum were torn through, and the broad ligament was divided with the clamp and cautery. The wound was closed with wire sutures.

Soon after the operation the patient complained of a great deal of pain and flatulence; and on the third day she was beginning to become very weak, but the wound showed no signs of inflammation. She died on the sixth day, Sept. 14th.

Autopsy five hours after death.—Symptoms of general peritonitis were observed all over abdomen; the incision had not united at all. The intestines and stomach were very much distended with flatus; patches of effused lymph were to be seen in the neighbourhood of the wound; the capsule of the kidney was adherent, the cortical portion shrunken.

CASE 4.—A. T——, aged twenty-eight, was admitted under Mr. Heath on Sept. 20th, 1870. She had not menstruated for sixteen months, since which time she had noticed a general enlargement of the abdomen, equal in every direction. The swelling was found to be composed of solid and elastic masses, irregularly disposed. The girth at umbilicus was 48 in. The patient was slightly pale, but not markedly anæmic.

She was operated on on Sept. 24th. The tumour was found to be a multilocular cyst of the left ovary; the pedicle was secured with a clamp. Fluid was removed to the extent of seventeen pints. The cyst weighed twelve pounds and a quarter. The patient was in much pain two hours after the operation; in three hours she was very pale and faint. It was found that hæmorrhage had occurred from the clamp to a considerable amount, and that the pedicle had slipped into the abdomen. Mr. Heath was sent for, and at once opened the wound, caught up the pedicle with the fingers, and secured it by two clamps. The patient rallied slightly, but died rather suddenly sixteen hours after the operation.

Autopsy thirty hours after death.—A large quantity of blood, some of it fluid and some solid, was found in the abdominal cavity. There was no trace of inflammation; the viscera were healthy; the heart was uncontracted; all its cavities contained blood.

Remarks.—The unfortunate result in this case was due to the faulty construction of the clamp employed, in consequence of which it could not be closed with sufficient power. It was to be regretted that more prompt measures were not taken by the then resident officer to arrest the hæmorrhage as soon as it was discovered, without waiting for the arrival of the surgeon.

CASE 5.—C. S——, aged thirty, was admitted under Dr. Meadows on Oct. 11th, 1870. She was a single woman; had noticed for two years that the abdomen was increasing in size, but she did not observe that the enlargement was greater on one side than the other. During that time she had had a slight dragging pain in the left side under the ribs. She

dated the enlargement from the time of the occurrence of an attack of dysentery two years previously. The girth at the umbilicus was 37¾ in.; from the right anterior superior spinous process of the ilium to the umbilicus 9½ in.; from the left anterior superior spine, 9¾ in. Perfect fluctuation could be elicited throughout the tumour, and resonance in left flank. The remainder of the tumour was dull, except at the lower part of the right flank. She had a constant desire to pass water. The tumour could not be felt per vaginam.

The operation, which took place on Oct. 22nd, was attended with no difficulty. The cyst, which was uniloculer, was removed; the pedicle was tied with strong ligature thread, and dropped into the abdominal cavity; the wound was closed; and the abdomen was covered with linseed-meal poultices, of which each contained a drachm of opium, and which were changed every four hours. The tumour weighed 3½ lb.; the fluid measured fourteen pints. On the fifth day the patient had recovered well from the operation. She had been principally troubled with pain—which was relieved by the subcutaneous injection of morphia,—with slight flatulence and a little vomiting. Albumen appeared in the first urine which was drawn off after the operation, but was not found afterwards. The sutures were removed, and the wound was found to be entirely healed. The abdomen was flaccid and free from tenderness. The poultices were discontinued. She was discharged on the thirty-sixth day, having recovered without a drawback.

Dr. Meadows introduced a plan of after-treatment in this case which has proved very successful in all the following cases—viz., that of keeping linseed-meal poultices with opium constantly applied to the abdomen for the first four or five days after the operation, until the danger of peritonitis has passed. The value of poultices in the treatment of peritonitis suggested to him their possible value in its prevention.

CASE 6.—L. S——, aged thirty-eight, married eight years, had had two children, the last of which was born two years before admission. When she came under the care of Dr. Protheroe Smith, in May, 1870, she had noticed her abdomen increase in size for two years; after about eight months, she was seized with sudden cramps and spasms in her abdomen, which compelled her to keep her bed for three weeks.

On admission, her abdomen was found to be of an ovoid shape, the tumour lying, as it were, diagonally, with its upper part at the left hypochondrium; it projected anteriorly very much, especially at the upper part. Good resonance was found in the flanks, and free fluctuation everywhere. The skin was not movable over the tumour. The girth at the umbilicus was 37½ in. On the tumour being tapped, fourteen pints of brown grumous fluid were evacuated. On Aug. 2nd the cyst was tapped with Dr. Smith's aspirator to the extent of ten pints in forty-five minutes. There remained solid matter on the right side, extending from the right inguinal region to the extent of six inches towards the umbilicus; it was movable and tender. Also solid matter on the left side, which gave the idea of being superficially situated.

The patient was readmitted on Sept. 29th. The girth at the umbilicus was 34 in.

Oct. 13th.—Bled to five ounces by Dr. Smith's order.

The operation was performed by Mr. Christopher Heath on the 20th of October. The abdominal and cyst walls were very thin; the latter contained ten pints of turbid fluid. The adhesions being broken down on the left side, it was found that the cyst was held to the abdominal wall by an apparently scirrhous growth. This yielded to traction, and the greater part of it came away, but some was left in the abdominal wall. The cyst was then drawn forwards, and found to spring from the right ovary. The pedicle was tied, cut off, and dropped in. Linseed-meal poultices with opium were applied to the abdomen, and repeated every four hours. The tumour weighed 2¼ lb.

On the fourth day the patient had done very well, having been only troubled with flatulence and occasional pain. All the sutures were removed; the wound had perfectly healed. On the fourteenth day it was recorded that, for the last four days, the temperature and pulse had been rising gradually to 103·2° F. and 148 respectively. The patient was found to have a sloughy bed-sore of about the size of a crown-piece. She became gradually weaker, the pulse and temperature continuing high. The bed-sore, though not increasing much in size, continued to show an unhealthy appearance. The feet and legs became swollen, and she died on the thirty-fourth day.

At the post-mortem examination the cancerous growths were found to have increased considerably, and to have completely buried the pedicle. The pelvic organs were all matted together.

The case was successful as far as the operation was concerned; and the patient derived remarkable relief from the dragging pain she had constantly experienced prior to it. The progress of the case immediately after the operation did not appear in any way affected by the presence of the cancer, which ran its course, and eventually proved fatal.

[The report, comprising five other cases, will be concluded in our next number.]

Medical Societies.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEB. 13TH, 1871.

MR. GAY, PRESIDENT, IN THE CHAIR.

THE PRESIDENT announced that he had received a grateful letter from Dr. Orchon, of the army of defence before Charenton, announcing the safe arrival of vaccine points which had been sent in answer to his appeal to the Medical Society for its aid, as also the arrival of some vaccine lymph through the National Society.

Mr. BARNES showed a Fibrous Tumour that he had removed from the body of a woman, forty years of age, and who died very suddenly from profuse uterine hæmorrhage. The tumour seemed originally to have been without the uterus, but had protruded into the vagina; the presence of the tumour was ascertained before death, but the extreme prostration of the patient prevented any plan of removal being attempted. He had seen a similar case where a practitioner had mistaken the tumour for a fœtus; in this case the tumour became putrescent, and the patient died.

Dr. CRISP briefly related a case where labour was complicated by a large fibroid tumour of the uterus, and where the patient died of hæmorrhage.

Dr. WYNN WILLIAMS thought, from the smooth surface of the tumour, it must have been originally intra-uterine. Sudden and fatal hæmorrhage took place on its being extruded from the uterine cavity. He thought highly of the injection of the perchloride of iron solution as a means of arresting hæmorrhage. He had cured one case of hæmorrhage by removing a large tumour with the écraseur.

Mr. PETER MARSHALL thought the case remarkable from the rapidity with which the patient died; he would have suggested plugging the vagina.

Mr. WREDEN COOKE preferred injecting the perchloride of iron to plugging.

Mr. BARNES, in reply, stated that he had stopped one attack of hæmorrhage, and the second, in which the patient died, recurred, seven hours after, so suddenly that she was just dying as he arrived.

The PRESIDENT spoke of the value of a saturated solution of bichromate of potash as an application for the destruction of mucous polypi.

Mr. SPENCER WATSON exhibited two patients, subjects of Ptosis. In one case, that of a man aged sixty years, the ptosis had existed in both eyes from the age of ten years, when he received a severe blow on the head. The patient had been perfectly relieved by the removal of a portion of the skin of the eyelids of sufficient size to bring the edge of the eyelid within the reach of the occipito-frontalis muscle. A photograph was handed round showing the state of the patient before the operation. The second case was one of congenital ptosis of the right eye, which had been operated upon in a similar way, and with equal success. In a third case shown the ptosis had improved under large doses of iodide of potassium. The patient had been a great drinker and smoker.

Mr. JOHN DANIEL HILL showed a boy on whom he had performed excision of the knee-joint two years ago; the disease was extensive caries, and had existed for six years.

The leg was somewhat bowed, but was strong and useful; there was a shortening of two inches and a half. Mr. Hill also gave an account of a case in which he had successfully performed Pirogoff's operation for the removal of a portion of foot injured by a railway accident.

Dr. SEMPLE then read a paper on "Diphtheria and the Diseases allied to it or may be mistaken for it." He gave a sketch of the history of diphtheria from the early part of the present century, showing that our knowledge of it up to the year 1858 was derived from French sources. The first well recorded epidemic of the disease was observed by Bretonneau, of Tours, in 1818. About 1857 the disease began to attract attention in this country. Dr. Semple believed it was comparatively a rare disease, at times epidemic. It seemed to attack the rich quite as often as the poor. Dr. Semple believed croup and laryngeal diphtheria to be the same affection, agreeing here with Trousseau, Bretonneau, Guersant, Rilliet and Barthez. Commonly under the head of croup was comprised laryngitis stridulosa, a disease in which there is never any false membrane formed; also laryngismus stridulus, which is a spasmodic disease with no visible lesion anywhere. By recognising these distinctions among diseases called generally croup, practical errors would be avoided. In treatment, removal of the false membrane was important, while, at the same time, the patient's strength must be supported.

Dr. CRISP said that he could not think diphtheria and croup to be the same disease. Croup was never epidemic as diphtheria was. Genuine croup was rare after seven years of age; not so diphtheria.

Mr. JABEZ HOGG described the microscopic characters of the diphtheritic membrane, but said these did not much advance our pathology. He had seen the membrane on the conjunctiva.

Dr. STOCKER treated diphtheria differently from croup. The symptoms were different in the two diseases.

Dr. ROGERS had studied diphtheria as it first appeared in France, and had read a paper before this Society on the subject. He did not think diphtheria to be an inflammatory affection. [illegible]

Dr. SEMPLE, in reply, said that much change in the type of disease had taken place within the last thirty years. Croup might not now be of such an inflammatory type as formerly.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEB. 10TH, 1871.

DR. W. W. GULL, PRESIDENT, IN THE CHAIR.

DR. HANDFIELD JONES read a short paper "On Puncture in Anasarca," in which he advocated the making a single puncture in the calves of both legs with a fine trocar, and, after withdrawing the stilettes, leaving the canulas open for several hours, to allow the fluid to drain away. In this manner he succeeded in the first operation in drawing off sixty measured ounces of fluid from the right leg, but only ten from the left, in consequence, he supposed, of the canula not lying properly in the subcutaneous cellular tissue. In a second operation on the same man, three days afterwards, he drew off 120 ounces of fluid, besides a great deal which ran from the punctures for several days afterwards, sufficient to saturate three blankets. For the performance of the operation, the man was placed in a sitting posture, and this he considered important, as it facilitated the draining away of the fluid.

Mr. COOPER FORSTER asked the author if the advantages of the operation were presumed to consist in the single puncture, or in the kind of instrument used, and suggested that, if the canula remained long in the wound, irritation was likely to ensue.

Dr. DUCKWORTH thought Mr. Cooper Forster's suggestion good, and recommended a single incision rather than many. He also followed Dr. Gull's practice in making the punctures or incisions near the outer malleolus.

Dr. HILTON FAGGE believed that needles and multiple punctures were more practised at Guy's than Mr. Forster imagined, and remarked, as an important item in the operation, that the surrounding skin should be thoroughly greased, so as to avoid all contact between the discharge and the surface of the skin.

The PRESIDENT said that the circumstances under which anasarca occurred ought to be considered; that, according to his opinion, the plan of puncturing gave relief in cases of cardiac maladies, but was less admissible in cases of Bright's disease; that patients thought little of a needle, but disliked surgical instruments; and that the period at which puncturing should be practised was of importance.

Dr. HANDFIELD JONES also read a paper "On Two Cases of Chorea," in both of which he gave complete urinary analyses. The conclusions which he drew from these cases were—1. That during the height of the chorea the amount of the urinary excretion was much above what it was when the malady had ceased. 2. That the urea excretion during the chorea period was enormous, being no less than 10 grains per lb. of body weight, the normal amount being 3 or 3·5 gr. for an adult. During convalescence the urea amount fell to 3·9 grains per lb. of body weight. 3. The phosphoric acid excretion varied like the ureal, being no less than 60 grains during the acme of the disease, and only 14·5 during convalescence. The mean amount adopted by Dr. Parkes is 48·8 grains for an adult. 4. The uric acid was in fair amount during the acme of the malady, but became nil when recovery was established. 5. That an increase of 17 lb. in weight coincided with this great lessening of excretion and cessation of the neurotic disorder.

Dr. ANSTIE considered that the exact kind and quantity of food taken should be known, in order that the nitrogenous matter might be closely estimated. He also wished to know whether meat was taken freely during the acute stage, and at the time when urea was passed.

Dr. JONES replied that there was at this period no disgust of animal food, and that the patients were fed on the ordinary meat diet of the hospital.

Dr. BROADBENT remarked that diet might not have influenced the first case, in which an early analysis was made, and thought that chorea was the result of a local affection of certain parts of nervous centres in the neighbourhood of the corpus striatum and optic thalami, and was sometimes due to capillary embolism.

Dr. GREENHOW thought that chorea was usually due to some general constitutional condition of the system, and gave as an example the case of a girl most of whose relatives had, at one time or other, choreal tendencies.

Dr. FAGGE failed to recognise the theories enunciated with the fact that chorea was sometimes caused by fright, and remarked that, according to Drs. Grabham and Langdon Down, idiots were not liable to chorea.

Dr. BROADBENT and Dr. ANSTIE made some further remarks.

Dr. BUZZARD mentioned the case of a woman formerly under his care, who, during the process of gestation, suffered from tremors produced by fright, and whose child was subsequently the subject of chorea.

The PRESIDENT, having asked if the author believed that the treatment adopted helped decidedly to cure the patient, was answered in the affirmative, and concluded the discussion by remarking that there were, clinically speaking, two forms of chorea. The one occurred before the age of fourteen, and usually did well with very simple treatment, care being taken that the food is prepared properly, and given cleverly and at proper intervals, so that the habit of "bolting" the food common to choreal patients may be avoided. His own experience went to prove that chorea was oftenest fatal in girls of from sixteen to eighteen years of age.

Dr. BROADBENT read particulars of two cases of Paralysis of the Soft Palate, resembling diphtheritic paralysis. The first, a boy aged three, was brought as an out-patient to St. Mary's Hospital on September 10th, 1866. In July a bucket of water had been thrown over him, and he had had a cold and sore-throat. Afterwards the voice was noticed gradually to become nasal and articulation imperfect, and for some days all fluids taken had returned through the nose. He was also weak on his legs and liable to fall. The soft palate was pale, flabby, and motionless. The medicine ordered was cod-liver oil, and steel wine; sulphate of strychnine, one-sixtieth of a grain; with dilute phosphoric acid, five minims, in water, three times a day. The improvement was rapid, and on October 27th the patient was quite well.—In the second case, that of a girl aged six, admitted out-patient May 23rd, 1870, there was not only paralysis of the soft palate, but also loss of power in the

laryngeal muscles, and great weakness of the lower extremities. The voice was nasal; fluids returned through the nose, and there was danger of suffocation when solid food was swallowed. When she spoke a great rush of air preceded the production of sound, showing the imperfect adaptation of the vocal cords; and when the fauces were irritated there was neither sensation nor retching. The treatment was similar to that adopted in the previous case, and recovery took place, but much more slowly. The patient was discharged on August 29th. These cases were in many respects, if not altogether, similar to the cases of paralysis following diphtheria, and the interest attaching to them relates to the question whether paralysis of this character is a specific disease or a form of nervous paresis capable of being produced by other acute disease, or by debilitating influences generally.

Dr. WEBER commenced the discussion by remarking that three cases had come under his notice in which paralysis of the soft palate had occurred more than fourteen days after the commencement of inflammation. All these cases recovered without any special treatment. It might be a reflex phenomenon, but it was remarkable that in these cases, as well as in those of true diphtheria, considerable interval occurred between the primary attack and the subsequent paralysis.

Dr. SILVER said he had at present under his care a case somewhat akin to that narrated by Dr. Broadbent. The patient came into the out-patient room, walking with difficulty, yet quite able to move his feet; he took off his hat, and sat down. His face had a curious expression, being slightly drawn to the right, and the muscles about the mouth were so paralysed that the saliva dribbled from his mouth. He had ptosis of the right eyelid, and there was dilatation of the right pupil. Being asked a question, it was found that he could not speak; and, on further examination, it was found that he was quite unable to swallow. His palate was paralysed, and his tongue could hardly be protruded beyond the teeth. He was admitted an in-patient, when it was found that he had no power of retaining his urine, although there was neither paralysis nor anæsthesia of the lower extremities. He was fed by the stomach-pump, and he has now somewhat improved, and can swallow imperfectly, but cannot, though perfectly intelligent, utter a word. There was antecedent right hemiplegia, and a history giving suspicion of syphilis. This case was allied to those described by Trousseau, but was not progressive in its nature.

Dr. FAGGE related brief particulars of two cases bearing upon Mr. Broadbent's paper.

Dr. ANSTIE, in remarking that affections of this kind afforded immense scope for discussion, said that, according to his experience, mumps was the only non-diphtheritic throat affection in which the muscles of the soft palate lose their power.

The PRESIDENT remarked that in diphtheria the respiration is usually involved. He had seen affections of the cord follow non-diphtheritic affections of the throat. The examination of fresh cords in such cases by the microscope revealed a dull-white porcelain texture, with very little grey substance visible, loosened nerve-tissue, and no exudation or other change.

Dr. WILTSHIRE made some remarks, and Dr. BROADBENT briefly replied.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

FEBRUARY 1ST, 1871.

J. HUGHES BENNETT, M.D., IN THE CHAIR.

Dr. BENNETT introduced the discharged soldier, N. H—— already the subject of much discussion. In answer to questions, he confirmed his former statements that he had been salivated both in India and at Netley.

Dr. A. G. MILLER introduced two patients—1. A woman who suffered from a neglected whitlow. Four sinuses had formed leading to bare bone. Under simple water-dressing the sinuses had healed, leaving a useful thumb. 2. A girl from whose back he had removed a fatty tumour. The wound had healed without any suppuration. No dressing was applied.

Dr. G. BALFOUR brought forward, as an example of vanishing cardiac murmur, a lad who, in 1867, suffered from a musical presystolic murmur; in 1869, from an extremely loud and well-marked systolic murmur, loudest at the apex. Both had completely disappeared.

Dr. P. H. WATSON showed the following pathological specimens:—1. A large Monolocular Ovarian Tumour with very thin walls, removed a few days previously. It contained six gallons of fluid. 2. An Epithelioma implicating the upper and lower eyelids and the adjacent malar bone. The eyeball, eyelids, and malar bone were removed; a good result ensued. 3. A Great Toe amputated for melanotic disease which followed an injury. 4. Both Testicles removed at the patient's earnest desire on account of advanced tubercular disease. 5. A portion of Omentum removed during an operation on an incarcerated hernia. Its great bulk rendered removal necessary. 6. The Bones of the Wrist-joint removed, on account of disease, by means of a central longitudinal dorsal incision.

Dr. THOMAS R. FRASER read a paper entitled "Sketch of the present state of our knowledge respecting the action of Mercury on the Liver." The author commenced by defining the word "cholagogue." It implies merely an action whereby the *flow* of bile is increased; it can only indirectly imply an action whereby the *formation* of bile is increased. One of the chief symptoms of a diminished or perverted flow of bile is a change in the character of the fæces. They become of an offensive odour and clay-coloured. Direct experiments on dogs have shown that absence of bile brings about these changes. Mercury has the power of changing these characters, and it is probable that the bile-pigments are increased in the fæces after the administration of mercury. The experiments of Michea go far to prove this. Dr. Fraser referred to the objections that had been urged against the cholagogue action of mercury by the experiments of Scott and the Edinburgh committee. The opinion was expressed that these investigations have no direct bearing on the cholagogue action of mercury. This action being one whereby the flow of bile into the duodenum is increased, and the proofs of its existence being mainly derived from observations on such diseased conditions as impede or pervert this flow, it cannot be disproved by experiments which have reference only to the influence of mercury on the formation of bile, and which were performed in the absence of the pathological conditions in which we find that mercury causes a most marked increase in the flow of bile. In conclusion the following argument was advanced in favour of a cholagogue action of mercury:—1. One of the most obvious symptoms in certain diseases is a condition of the fæces indicating diminution or absence of bile. 2. In many of these diseases mercury restores the fæces to their normal condition, or produces in them certain characteristic appearances. 3. The appearances caused in fæces by the administration of mercury are due to the presence of bile constituents.

Dr. Bennett, Dr. Gamgee, Mr. Lister, and others took part in the discussion which followed.

Reviews and Notices of Books.

The Management of Infancy, Physiological and Moral, &c. By ANDREW COMBE, M.D. Tenth Edition. Revised and Edited by Sir JAMES CLARK, Bart., K.C.B., M.D., F.R.S., Physician in Ordinary to the Queen. Edinburgh: Maclachlan and Stewart.

THIS excellent little book should be in the hand of every mother of a family in England; and if some of our lady friends would master its contents, and either bring up their children by the light of its teachings—giving a practical illustration of the advantages of sound physical and moral training to their offspring—or communicate the truths it contains to the poor by whom they are surrounded, we are convinced that they would effect infinitely more good than by the distribution of any number of tracts whatever. The treatment of women during their pregnancy and after childbirth, the early management of infants, and the discipline

and education of children at a somewhat more advanced age, have all undergone immense improvement during the last fifty years; and we are sure that a part at least of this improvement has been due to the spread of the doctrines inculcated by Dr. Combe, which are so full of common sense, and are so plainly and practically expressed.

Dr. Combe commences by pointing out the influence of hereditary predisposition; and the duty, too much neglected in this country, that marriage should be contracted only by those that are healthy, not too nearly allied in blood, and sufficiently, yet not too far, advanced in years, in order that the offspring may stand the best chance of being healthy and vigorous in mind and body. In the section on the influence of the mother's mode of living during pregnancy on the health of the child, where the imagination of so many writers would have led them into all sorts of fantastic statements, we are struck by the thoroughly sensible character of the author's remarks. His observations on diet, dress, and general hygiene are but an expansion and illustration of this sentence: "That from the moment of conception it is the paramount duty of the mother to endeavour to maintain, by every means in her power, the highest state of mental and bodily health of which her constitution is susceptible; and this is the more binding upon her since its performance involves no sacrifice worthy of the name—none which will not be amply compensated by its favourable effects on her own health as well as on that of her infant." The causes of infant mortality and the conditions of health are briefly but clearly given. There is no subject on which such crass ignorance, as many of our readers well know, prevails as on the subject of infant food. To give one instance only that fell under our notice some time ago. A mother was unable to suckle her child. The nurse in charge proceeded to bring it up by hand; and this consisted in placing a raisin, with the skin removed, in a small muslin bag, the end of which was inserted in the infant's mouth. It lived fourteen days. Dr. Combe's observations on the subject of nursing, wet-nursing, weaning, and the diet of the young child are founded on sound physiological knowledge; and are so plain that any moderately-instructed woman could understand and adopt them. The latter part of the book, bearing on the mental and moral education of the child, is not less worthy of praise.

Here and there we think a remark or two might have been omitted, those for instance bearing on phrenology (p. 188); and we can scarcely believe that Sir James Clark seriously thought that the use of soap to the body generally in the bath increases the liability to cold. Speaking as dwellers in the metropolis, we doubt whether the application of cold water alone will remove the peculiar greasy smuttiness that accumulates on the face and hands after a day's exposure to a thick fog. But, putting aside such very slight defects as these, we think Sir James ably discharged his office as editor, and has done well to keep in the minds both of the profession and of the public the wholesome counsel of a very intelligent and well-educated practitioner upon what must always be regarded as the chief duty of a woman, the rearing of healthy offspring.

On the whole, we consider this work to be one of the few popular medical treatises that any practitioner may recommend to his patients; and though, if its precepts are followed, he will probably lose a few guineas, he will not begrudge them if he see his friends' children grow up healthy, active, strong, and both mentally and physically capable.

Whilst Sir James Clark did good service in editing the work, her Majesty has shown her appreciation of its value by accepting the dedication.

The Correlation of Zymotic Diseases. By A. WOLFF, F.R.C.S. London: J. and A. Churchill.

LIKE a great many practical members of the profession, the author of this pamphlet is very dissatisfied with the theory of zymosis as an explanation of what are conventionally called zymotic diseases. He points out justly that the so-called germ or poisonous matter has hitherto escaped the test-tube and the object-glass, and how it first came into existence no one has explained. He asks what has become of the germs or particles of black death and sweating sickness? and where was the cholera hiding previous to its outbreak in the delta of the Ganges? It is impossible to imagine that the first created individual was formed with all these diseases upon him. The author is of opinion that the phenomena may be accounted for in strict accordance with the physical laws which govern growth and regulate decay—namely, the principle "that a molecule, set in motion by any power, can impart its own motion to another molecule with which it may be in contact. A dissection wound affords the best example of zymotic action in its purest and simplest form, there being no question of a special germ or vitiated secretion; so also it is observed when particles of texture which are themselves inflamed become capable of exciting inflammation in particles with which they have contact." In this process, says the author, lies the entire explanation of zymotic disease. There is no multiplicity of poisons. The molecular motions may vary in nature and intensity. They may be classified in groups. Variola, vaccinia, and varicella appear to be various degrees of intensity, as also measles and scarlatina, which were for a long time regarded as the same disease, and are not now more distinct than scarlatina from itself. Cholera, typhus, and enteric fever have many points in common. Puerperal fever, erysipelas, and scarlatina have a close relation to each other and to the action which is set up by post-mortem wounds. Organic matter in a condition of catalysis, being thus the common cause of zymotic diseases, sets up molecular motion in the same direction as that from which it was derived. If a tuning-fork be brought into contact with a sonorous body, the two vibrate in unison; but it would not be surprising to find that, of many persons subjected to the same contagion, some were to manifest symptoms of the disease in another form, and such cases are quoted. If a number of individuals aggregated under unfavourable hygienic conditions are submitted to the poisonous influence of animal matter in a state of catalysis, the exact form that the disease or epidemic shall assume may depend upon a variety of causes, such as the channel through which the noxious agent comes into contact with the healthy subject, and the conditions, hygienic and other, under which those subject to the noxious influence are living.

We have given this lengthened notice to a very suggestive pamphlet. As the author observes, the hypothesis may help us to explain many obscure points in the history of zymotic diseases. It will be seen that the molecular motions of synthesis and catalysis that mould our frames from the first moment of intra-uterine life until, and even after, death, account for many of the phenomena of disease. If this hypothesis be true, we shall cease to regard disease as an entity. A new impulse will be given to sanitary regulations, because it will be seen how vain it is to stamp out one form of disease whilst the causes still remain that must inevitably lead to its speedy reappearance in the same or some cognate form. And, finally, curative medicine will be encouraged to seek the means of averting preventable catalytic motion when it comes to be acknowledged that the same principle of cure will apply to a variety of diseases.

Foreign Gleanings.

THREE CASES OF TETANUS CURED BY HYDRATE OF CHLORAL.

DR. DORIGO has published, in the *Gaz. Med. di Padova* of December 17th last, the case of a boy of thirteen who suffered from tetanus in consequence of a wound of the sole of the foot. The final recovery took place on the fifty-fourth day, the average daily dose having been ninety grains. When the narcotic effect became weak, the chloral was immediately given again. Dr. Grandisso-Silvestri mentions, in the same paper, another case, that of a girl eight years old, who had tetanic attacks after a lacerated wound of the middle finger of the right hand. She soon recovered, after having ingested about half an ounce of chloral in five days. Dr. Bensasson, of Tunis, has also communicated to the *Imparziale*, of Florence (Feb. 16th, 1871), the successful case of a boy, aged thirteen, who was seized with tetanus in consequence of a nail running into his foot. The treatment lasted thirty-five days, about five ounces of chloral being used altogether.

INDIA-RUBBER BREAST-PUMPS.

Dr. Mettenheimer points out (*Memorab.* xiv., 12), that aphthæ are often generated by the use of these. In spite of cleaning the apparatus, a difficult task as the neck is small, some milk is mostly left in the india-rubber bottle. Decomposition ensues, and germs are generated which eventually settle upon the nipple, and thus contaminate the child's mouth. If the apparatus mentioned is used at all, it will be necessary to wash it out each time with diluted spirits of wine.

INFILTRATION OF URINE.

This infiltration in the cellular tissue is generally regarded as extremely dangerous, and sure to excite gangrene. Dr. Menzel shows, however (*Wien. Med. Woch.*, Nos. 81 to 85, 1869), that healthy urine has no such effect, and that apprehensions in this respect are greatly exaggerated. He proves by experiments that, with an alkaline urine, the ammonia is the principal agent in the septic phenomena. In cases of injury to the urethra, where no actual retention occurs, no very active measures need be had recourse to. When, however, no instrument can be passed, and incomplete micturition occurs, we are advised to cut down at once upon the urethra.

INVESTIGATIONS RESPECTING NORMAL AND PATHOLOGICAL LOCAL TEMPERATURE.

Dr. Jacobson, of Königsberg, relates, in Virchow's *Archiv*, vol. 51, second part, a series of experiments upon animals, by means of thermo-electricity, to ascertain the actual temperature of some viscera. He found, contrary to Claude Bernard's opinion, that the blood is warmer in the left than in the right heart. But he verified and found correct another assertion of Bernard's—viz., that the liver presents a higher temperature than the axilla and the rectum. Dr. Jacobson also recognised that the temperature of intensely inflamed skin and muscles never runs as high as the temperature of inner portions of the body, such as the upper part of the rectum or vagina, or the cavity of the abdomen. M. Bernhardt and Dr. Jacobson excited, by caustic injections, pleuritis and peritonitis with exudation, and by carefully experimenting and measuring, they found the following opinion of John Hunter's in accordance with fact, viz.: "That local inflammation cannot raise the temperature higher than the degree of warmth found at the source of the circulation."

INSTRUMENTAL COMPRESSION IN POPLITEAL ANEURISM.

Dr. Arata, surgeon of the Hospital of Genoa, lately tried Broca's compressor, which presents two pads acting alternately on the femoral artery, either at the groin or a little distance below. The case was that of a man aged thirty-five, and the aneurism had been the consequence of a violent strain. Digital compression had been tried at the patient's residence, but was given up owing to inadequate assistance. The instrumental compression was required for forty-three days before the pulsations of the sac ceased. The man, however, eventually made a good recovery; though this case offers a great contrast with those of digital compression which have been recorded, and where, in a few days, the consolidation of the contents of the sac was obtained.

ROYAL COLLEGE OF SURGEONS.

PROFESSOR ERASMUS WILSON'S LECTURES ON DERMATOLOGY.

LECTURE V.

THE treatment of eczema formed the subject of this lecture. The local treatment was first discussed. Mr. Wilson explained to his hearers that the local symptoms in all the forms of eczema were essentially the same, differing in quantity and degree only. The chief symptoms were those of inflammation, and it is necessary to remember that the skin is in a state of excessive irritation, and the object should be to avoid, especially in the early stages, anything that increased this irritation. The chief remedies calculated to soothe the skin are flour, used freely from the dredging-box, a mixture of starch and oxide of zinc, with or without camphor, in addition to fullers' earth, lycopodium, and oatmeal. These powders should be freely applied, so as to form a constant coating to the morbidly sensitive skin. Sometimes these remedies do not agree. Then a lotion made of three drachms of calamine powder, and the like of oxide of zinc, with two drachms of glycerine and six or eight ounces of lime-water, Mr. Wilson said, is often efficacious, and particularly where the surface commences to exude, and is irritable. The soothing plan of treatment should be kept up until the disease showed a tendency to lapse into the chronic stage, at which time the benzoated oxide of zinc may be regarded as the most efficacious medication. It should be used so as to form an impervious layer, and this layer should not be much disturbed by washings and cleansings. The benzoated oxide-of-zinc ointment Mr. Wilson regards as a "specific" for eczema in the advancing stages. He is in the habit of mixing with it a little spirits of wine in the proportion of a drachm to the ounce. The best guide as to the continuance of a remedy or plan of treatment is the patient's sensations as to comfort or discomfort produced. The soothing treatment is applicable as a palliative to the early and acute stages, or such as are characterised by heat and itching, or redness and moist excoriation. But a different kind of medication—one calculated to stimulate and rouse the tissues to a healthy action—is needed where infiltration and desquamation are the main conditions present. The zinc ointment will soften, heal cracks, and remove the scaliness in all cases; but something more is needed to meet infiltration. The best stimulants for the removal of deposit, and to rouse the tissues to activity, is soap. In the chronic cases soap should be freely used with such friction as will enable its action to influence the vascular tissues, the part after free soaping being dressed with zinc ointment. The direct consequence of the soap treatment is an exudation from all the tissues, which are emptied (by a repetition of the drain caused by the stimulation) of exudation. Potash, mercurials, tar, croton oil, and strong nitrate-of-silver solutions act in a similar manner. For pruritus, the best remedies are lotions of soda, and the like, of prussic acid, opium, and of hot water, but also drugs that act constitutionally upon the nervous system. For lichen urticatus and its itching Mr. Wilson commended Hebra's prescription as a specific—viz., one ounce of soap, one ounce of pyroligneous oil of juniper, one ounce of alcohol, and five ounces of fluid. For the itching of lichen planus Mr. Wilson gives an emulsion of bitter almonds with bichloride of mercury or prussic acid. For eczema of the eyelids a weak nitrate-of-mercury ointment; for eczema of the scalp, nitric oxide-of-mercury ointment, with benzoated lard in the proportion of one part in three; for dermatitis exfoliativa, the linimentum calcis.

A few remarks were made at the end of the lecture on the constitutional treatment of the disease, which varied with the age and constitution of the patient. In all cases eczema was associated with lowered vitality. In infancy invariably with defective nutrition and deficient feeding; in mid-life with mal-assimilation; and in late life with mal-assimilation associated with irritability, waste, and decay. Every cause of exhaustion occurring in the growing periods should be met and treated. The particular specific for eczema is, in Mr. Wilson's opinion, his well-known ferro-arsenical mixture.

THE LANCET.

LONDON: SATURDAY, MARCH 4, 1871.

THE announcement contained in our journal of last week, that the Report of the Royal Sanitary Commission had been laid on the table of the House of Commons, will no doubt have led our readers to anticipate that we should soon be able to give them an account of its contents. We are happy to be in a position to do so thus early; for, although it may be that the Report will yet undergo some little verbal modification before it is definitively published, we do not imagine that the recommendations are likely to be subjected to any substantial alteration from the shape in which they have come under our notice.

It is due to the Commission to premise that they appear, so far as a hasty glance through the numerous pages of the Report enables us to judge, to have done their work with an amount of thoroughness which deserves acknowledgment—the more as this is not always a characteristic of Royal Commissions. The barest synopsis of the main features of the Report must be necessarily lengthy, by reason of the extent of ground travelled over by the Commission; we shall therefore have to be content for the present with a selection of points in which the medical profession will naturally have the strongest interest.

We pass over the instructive *résumé* of the history of sanitary legislation up to the present time, as well as the preliminary observations setting forth the importance of the inquiry and the causes which have hitherto rendered sanitary progress so slow and unsatisfactory. In considering the large and comprehensive subject of local sanitary administration, the object kept in view has been to utilise as far as possible existing machinery, while putting an end to conflicting jurisdictions. It is held that there should be one local authority for all public-health purposes in every place, so that no area should be without one, or have more than one, such authority. The sanitary authority in urban districts is to be either the Town Council, the Improvement Commission, or the Local Board, according to circumstances duly provided for; while in rural districts the Board of Guardians is selected, for reasons identical with those advanced by Mr. SIMON in his Eleventh Report. It is proposed, however, to extend the tenure of office of guardians to the same period as that enjoyed by members of local boards—namely, for three years, with provision for the annual retirement of a part of the board. Coincidence of local areas is strongly insisted on—as indeed is, beyond question, essential to the perfection of a sanitary scheme. The Commission are of opinion that, as sanitary laws must bear a constant relation to the Poor Law, local government, both in town and country, should be arranged in two sub-departments for sanitary and Poor-law administration, under one common head. Who this head is to be we shall come to presently, when we have to speak of the central authority. The utilisation of the Poor-law medical service for sanitary purposes follows necessarily from the recommendations already noticed. Every local health authority is to be required (not simply permitted, as before) to appoint at least one officer of health, "being a legally-qualified medical practitioner, or possessing such other qualification in medical science as shall be declared by the central authority to be satisfactory." In rural districts the medical officers of health would, as a rule, be the Poor-law medical officers acting in their respective medical districts; and where this is not practicable or expedient, the relation of the medical officer of health and the Poor-law medical officers to each other is to be arranged by the local health authority, with the approval of the central authority. And in order that the local medical officers may feel themselves free to act fearlessly in the discharge of their duties, it is recommended that they should not be removable from office without the sanction of the central authority. We stay not now to discuss the position and duties assigned to the local medical officers; that we leave to a future opportunity, observing meanwhile that the intention of the Commission seems to have been to dignify the one and to extend the range of the other within the widest practicable limits. There are also many details of the proposed local sanitary organisation which we must for the present leave unnoticed, that we may devote our remaining space to a brief exposition of what the Commission propose in reference to a central authority. For it is a self-evident fact that central supervision is the main-spring of local action; and that supervision needs to be of the most effective kind. Obviously this condition must be wanting in a system which, like the one that has hitherto done duty for us, is split up into sections having no element of cohesion. To supersede this the Commission recommend the consolidation of the central executive for sanitary and Poor-law purposes under one head—a "Minister whose title should clearly signify that he has charge of both departments." He is not to be entitled "President of Poor Law," because that would convey the wrong impression that the care of health was subordinated to the provision for infirmity. There would, in fact, be two distinct though correlative departments—each, perhaps, best represented by a permanent secretary, as suggested by the Commission. It is proposed to transfer to this new Ministry, the Medical and Veterinary Departments of the Privy Council, the Local Government Act Office, the Registrar-General's Office, and all sanitary functions now exercised by or under the Privy Council, the Home Office, or the Board of Trade respectively. The post of chief medical officer is to be retained by Mr. SIMON, with "concentrated superintendence of all public sanitary arrangements, whether those of local boards or guardians or any other local authorities." It would appear from this that the existing chief medical officer of the Poor-law Board is to be relieved of whatever medico-sanitary functions he may now be discharging. With regard to the important matter of inspection, it is proposed to amalgamate the existing inspectors of the Medical Department of the Privy Council, of the Local Government Act Office, and of the Poor Law into one central inspectorate. By a suitable arrangement of circuits, and with some addition to their number, it is concluded that the existing staff of inspectors

will be adequate for the general purposes of routine inspection. But, for specific purposes, it is contemplated that "a variety of officers will be requisite": some with engineering knowledge; some with medical knowledge, "who would be the agents of the chief medical officer in the central department, and would bring him into relation with the 4000 medical officers already attached to the local authorities throughout the kingdom"; and some "with special knowledge in other branches of science, who will either (1) be retained on particular occasions, or (2) should be attached without salary to the central office for terms of years, and to whom special points of inquiry should be referred, with due remuneration for each such consultation."

The central and local organisation being thus provided for, the Report is further occupied with recommendations relative to the limitation of infectious or contagious diseases, the inspection of hospitals, the provision of mortuaries, the administration of the Burial Acts, the inspection of shipping in ports, the provision of water-supply, the prevention of water-pollution, the improvement of the registration of deaths, the registration of still-born children, and the registration of disease. It also devotes a brief paragraph to inculcating the study of "State medicine."

Of course all the care bestowed by the Commission upon perfecting the machinery of sanitary organisation, both centrally and locally, would be in great measure fruitless, were it not coupled with the consolidation of the sanitary laws into one comprehensive and comprehensible statute; and very full suggestions for the assistance of the Government in framing such a measure are given.

Here, then, we have, in a highly concentrated form, the materials for such a work of sanitary reform as, if it were carried out according to the intention of the Commission, would leave little to be desired but the speedy growth of sufficient intelligence amongst all, but chiefly the poorer classes, to enable them to appreciate the inestimable benefits thence accruing.

The nature of the Report whose contents we have been endeavouring to epitomise is, on the whole, such as to render our functions as critics unusually agreeable. In point of fact, the broad features of the scheme recommended by the Commission agree almost literally with what have been already sketched out in this journal.* We have abundant reason, therefore, to be gratified with the proof thus afforded of the soundness of the propositions affirmed by us while the inquiry which has now closed was in the early course of progress. We recur to one suggestion of ours which we hope may be considered in the Bill which the Home Secretary is expected to introduce shortly for giving effect to the labours of the Commission—namely, that, as there is to be a change in the functions as well as in the tenure of office of guardians of the poor, their title should be changed into that of "local councillors"; the desirability of this change rests not merely on sentimental grounds, but is called for in order that the greatly extended interests to be confided to their care may be adequately symbolised.

If the Government adopt the recommendations of the Commission, as we trust they will do, and the new sanitary organisation becomes an accomplished fact, the effect upon the medical profession must necessarily be very great. Over three thousand practitioners, who now labour zealously, but often enough thanklessly and obscurely, in the service of the Poor Law, will at once become the recognised officers of public health, a change which is certain to improve their position in every respect. Then, taking account of the increased inspectorial duties to be performed, the number of staff medical appointments open to the profession must necessarily be augmented. And, in short, looking at the subject in all its bearings, we conclude that the Report of the Royal Sanitary Commission is one of the most important documents that has ever come under our notice.

* Vide THE LANCET of Oct. 16th, Dec. 4th, and Dec. 18th, 1869, pp. 546, 777, and 847.

SINCE the Council of the College of Surgeons was to consider on Thursday, the 2nd inst., the scheme of amalgamation by which a conjoint examination for the licence to practise in England was to be instituted, we felt a delicacy in discussing beforehand a document marked "Private and confidential"; but our contemporaries, who seem to be troubled with no such scruples, having freely stated the conditions of the proposed contract, we feel that, in justice to our readers, we ought no longer to hold our hand. Before, however, discussing the plan put forward, which differs in no respect from the one we noticed in condemnatory terms just a year ago (THE LANCET, Feb. 26th, 1870), we may trace the corporate negotiations up to their present period of existence. On referring to THE LANCET of the date just given, it will be found that the sudden *consensus* of the three rival licensing corporations of England was due to the celebrated letter of the Medical Officer of the Privy Council dated Feb. 2nd, 1870. In this letter the great dissatisfaction of the Privy Council with the existing state of affairs of the medical profession was plainly expressed, and the announcement made of a proposed new Medical Bill; and hereupon the General Medical Council met in all haste to protect its privilege of doing nothing, and the three corporations also put their shoulders to the wheel to try to patch up some arrangement between themselves to satisfy the requirements of the Privy Council. As is well known, the Government Bill eventually proved so unsatisfactory that it was perforce abandoned, and the corporations were left in command of the field, and, wise in their generation, they resolved if possible to carry out in cold blood what they had adopted in hot haste, hoping thereby to forestall all Government aid; in which desire, with the assistance of the General Medical Council—another interested body,—they appear to have been only too successful.

To come, then, to the scheme of amalgamation by which the practitioner of the future is to be examined and duly certificated. In the first place, the Apothecaries' Society has made a hard and successful fight for a much greater share of representation than was vouchsafed to it in last year's scheme, and has succeeded in establishing equal rights with the College of Physicians to appoint Examiners in Medicine. How the nominees of Pall Mall and of Blackfriars will amalgamate we cannot tell; but the scheme is that ten Examiners in Medicine shall be appointed equally

by the College of Physicians and the Apothecaries' Society; ten Examiners in Surgery by the College of Surgeons; eight Examiners in Anatomy and Physiology, three by the College of Physicians and five by the College of Surgeons; six Examiners in Midwifery, two by each of the corporations; and eight Examiners in Materia Medica, Botany, Chemistry, and Forensic Medicine, equally by the College of Physicians and the Apothecaries' Society. The fee for this conjoint examination (which will entitle the successful candidate to the three diplomas of the corporations) remains, as settled last year, at £30; and of this sum, one half is to be appropriated to the payment of examiners and the expenses of examinations, and the other half will be divided amongst the three corporations, upon the principle of giving to each corporation a sum proportionate to that which each has respectively obtained from the grant of licences on the average of the last five years.

The objections we urged against this conjoint examination of the corporations last year remain in force as much as ever. We do not believe in entrusting admission to the medical profession to three bodies whose very existence depends upon the number of candidates that shall be passed. It is all very well to say that the examiners can have no interest in passing improper candidates; but we reply that they have a direct interest, for not only do their fees depend upon the number of diplomas issued, but, if the sternness of an examiner should prove detrimental to the coffers of his own corporation, we should like to know what chance he would have of being reappointed when his period of office expires.

The only satisfaction we gain from the new scheme is, that the Council of the College of Surgeons will lose the last excuse for not separating the examiners in Anatomy from those in Surgery. The Council has taken care to secure seats for the whole of its ten examiners on the Surgical Board: surely it will not now refuse to carry into effect its own resolution, and appoint five examiners in Anatomy and Physiology from among actual teachers of the subjects, who will be able to meet the nominees of the sister College on equal terms.

IN a little pamphlet just published, Dr. H. SILVESTER, of Clapham, so well known for his excellent method of restoring suspended animation in asphyxia, advances an ingenious hypothesis of the nature of the spleen, which, though not in any respect new, is important as being supported by a large number of considerations and some ingenious reasoning tending to demonstrate and firmly establish the opinion, now generally entertained, that the spleen is a blood-gland. Dr. SILVESTER first shows, from the history of the alimentary canal, that it may be regarded as mesial and symmetrical at its commencement and termination, but unsymmetrical in its middle portion. From the lips to the diaphragm it is mesial and symmetrical. The stomach and small intestine are unsymmetrical; the large intestine, again, is essentially mesial and symmetrical. He contends that the right half of the stomach and the right small intestine are alone developed, the left half of the stomach being only slightly developed as the cardiac cul de sac, and the small intestine being altogether undeveloped, with the exception of the vermiform appendix. If the left half of the stomach opened by a pyloric orifice into an intestine which ran sinuously to the vermiform appendix, we should have a complete double and symmetrical small intestine. This deficiency of the left half of the middle segment of the alimentary canal, he points out, explains why the stomach is supplied by one artery instead of by two vessels, one on each side; so that it depends upon neighbouring organs for its vascular supply. It explains also why the small intestine obtains only one vessel, whilst the large intestine is supplied by two; and why the various glands, Peyer's gland in particular, are not symmetrically arranged. Passing to the liver, he shows that, instead of, as usual, regarding it as a mesial organ with an undeveloped left and a partially developed right lobe, the latter represented by the lobulus Spigelii and lobulus caudatus, it may more properly be considered as an asymmetrical organ belonging entirely to the right side, that of the left being non-developed in accordance with the non-development of the left small intestine. Hence, although the largest viscus in the abdominal cavity, it is supplied by only one artery from the aorta, instead of by two; hence there are not two portal systems, one for each side of the abdomen; and hence also there is but one umbilical vein instead of two, whilst there are two umbilical arteries. Turning finally to the spleen, he points out that this is properly to be regarded as an asymmetrical organ; and, whilst admitting that it has long been allowed to possess important relations both to the development and to the disintegration of the blood-corpuscles, he contends that this function has been shown by the researches of BERNARD and others to be to some extent shared by the liver. Hence the liver is equivalent to the spleen *plus* a bile-secreting apparatus; and from the relations of these organs to the food and to the blood respectively, still bearing in mind the absence of the right small intestine, we obtain an insight into the cause of the large size of the fœtal liver and the small size of the spleen before birth, with the diminution of the former and the increase of the latter after birth,—the circumstance of there being one splenic artery instead of two,—the unsymmetrical form of the organ,—and the absence of any biliary function. He concludes what we consider a very creditable piece of reasoning by the observation that the spleen is not the undeveloped liver of the left side of the body, nor is it the parenchyma of the liver disunited from the pancreas, nor is it a blood-gland in the mesial line of the body, having no homologous relationship with the liver. The spleen is a sanguiferous gland situated on the left side of the abdominal cavity. It is the left lateral homologue of a portion of the liver, the liver being a combination of a sanguiferous gland and a biliary apparatus.

WE understand that Mr. W. A. Hillman, F.R.C.S., surgeon to the Westminster Hospital, tendered his resignation at a meeting of the Committee on Tuesday, the 28th ult. At the same meeting Mr. Francis Mason, F.R.C.S., senior assistant-surgeon, also resigned his appointment, so as to qualify for becoming a candidate for that vacated by Mr. Hillman. Dr. Richard Davy, F.R.C.S., the zealous and efficient demonstrator of anatomy in the same school, is a candidate for Mr. Francis Mason's vacant post. We wish both these gentlemen all success.

Medical Annotations.

"Ne quid nimis."

THE GLASGOW INFIRMARY AND ANTISEPTIC SURGERY.

THERE are very few hospitals, if any, that afford better opportunities for the study of clinical surgery than the Glasgow Royal Infirmary, as a reference to the *résumé* just published by Dr. George Buchanan, of a year's surgical practice in his wards, will prove. It will be remembered that Professor Lister, in a communication to our columns in the early part of last year, directed attention to the results obtained by him in the wards of this infirmary. Dr. George Buchanan, on his re-election as surgeon to that institution, assumed the charge of Mr. Lister's wards on the departure of that gentleman for Edinburgh; and owing to the publication by Dr. George Buchanan of a clinical surgical report of his hospital experience during the past year we are in a position to show what the results have since been.

The number of patients admitted under his care during the year was 499, exclusive of the cases admitted temporarily and dismissed after their wounds, fractures, or dislocations had been treated. Of the whole number of in-patients, 470 were dismissed cured or relieved, and 29 died—a mortality of 1 in 17·2, or about 5¼ per cent., a very small proportion, considering the very serious nature of the injuries and diseases of the patients. 135 operations of various degrees of importance were performed during the year, with 5 deaths—a mortality of 1 in 27, or about 3¾ per cent. Many of the operations were, it is true, of a trifling character, but there were a number of very serious cases—as, for instance, nine cases of amputation of the thigh, two primary (for injury), and seven for disease, without a single death. "Never before," says Dr. Buchanan, "since I became a hospital surgeon, have I had the experience of so many amputations of the thigh without a death." Dr. Buchanan also adds, as regards the general results, that he knows of no hospital the operating table of which, during a year's practice, including cases of all kinds, can show a success superior to that above quoted. It appears that Dr. Buchanan performed twenty major operations during the year—nine being primary, and eleven for disease—with only two deaths, these latter being cases complicated with extensive additional injuries (a mortality of ten per cent).

The majority of the thigh amputations were by Mr. Carden's method through the condyles. It would not appear that Mr. Lister's antiseptic method was strictly followed in any of the cases. Dr. Buchanan finds the best dressing to consist of a few strips of lint dipped in carbolised oil, changed once or twice in twenty-four hours, according to the amount and nature of the discharge, with a free opening for discharge to drain away.

A large number of compound fractures (36) were treated during the year, some of them of great severity. They were all treated, as nearly as circumstances permitted, on the antiseptic principle; and there is no doubt, says Dr. Buchanan, that some of them were converted into simple fractures with a celerity that could not have been achieved by any other plan. Thirty abscesses, some of them very large, were opened and treated antiseptically, with, in most of them, an excellent result. Dr. Buchanan has for many years adopted the box-splint, well padded with carded oakum, as the most simple and efficacious apparatus for the treatment of compound fractures of the thigh or leg; and he speaks in deservedly high terms of the use of well-carded oakum as an antiseptic application to wounds. So impressed was he with its great utility that he recommended its being sent out to the ambulances of the French and German armies, and many tons were forwarded direct from Glasgow. It is so cheap that it can be used freely and changed frequently. Free exit for discharge, and a suitable porous material to absorb it, Dr. Buchanan very properly considers as the most important points in the treatment of all large wounds.

THE MEDICAL CLUB.

OUR readers will have noticed lately a correspondence in these columns touching the present status of the Medical Club, and we this week publish a letter from Dr. Lory Marsh, suggesting that the profession should take the matter into its own hands. It would appear that, after struggling with difficulties for four years, the Club has now attained such a position that there would not be any great risk run by the members if they resolved to manage their own affairs for the future. The fact that the Club has been maintained hitherto as a purely medical institution affords not only a sufficient *raison d'être*, but also a fair presumption that, when removed to larger premises, it will develop into a really prosperous undertaking. But to preserve it as an exclusively professional property it would be necessary for the profession to become the proprietor; for it is not to be expected that anyone carrying it on as a private enterprise would, even if himself a medical man, respect its special character longer than his own interest might be served by doing so. If at any time he were dissatisfied with the profit made, and considered that by throwing the Club open to other classes he would increase his income, he certainly would be at liberty to change its constitution. On the other hand, if the profession were to adopt and continue it on the joint-stock or mutual—in contradistinction to the private-venture—principle, it might be kept up as a purely medical institution, so long as it were supplied by subscribers with adequate means.

Dr. Lory Marsh estimates the amount of capital required to start it in the new house in Pall Mall at £5000. This would, of course, have to be found at once; but it is no great sum to be raised among the members of so large a profession, if they are desirous of holding the Club in their own undisputed, undivided, and permanent possession. They would take it over as a solvent concern, a condition which certainly reflects credit upon Dr. Lory Marsh's administration of its affairs; and there would seem to be no reason whatever for concluding that a medical should not be as flourishing as a military, naval, clerical, or university club.

The subject is one which demands the consideration of the profession as a body, and it is one which they must decide promptly. We draw attention to it because we believe the present to be, not only the most favourable, but the only opportunity which is likely to occur for preserving the Club as a distinctively medical establishment.

THE CONTAGIOUS DISEASES ACTS.

A VERY stormy meeting recently took place in the City Hall, Glasgow, to promote the repeal of the above Acts, at which an address was read from a lady whose name has become prominently connected with the movement. A report of the proceedings and of the address appears in the *Glasgow Daily Herald* of the 22nd ult. We may confidently assert that no impartial person would consider the address as affording a correct or fair statement of the results attending the working of these Acts. Fortunately, there is an antidote to these exaggerated and sentimental utterances in the same paper in the shape of some excellent letters on

this "Pro-Contagion meeting." Professor Nichol protests against the attempt to forestall the verdict of the Royal Commission or the assumption that the movement represents the feeling of himself and other professors and members of the University, who hold the Acts to be philanthropic in their design, and to have been hitherto beneficent in their results. Professor Nichol, in addition to citing the names of Professor E. Caird, Professor Ramsay, Dr. Young, and others, states that the Rev. Principal Barclay, the Rev. Dr. Caird, Professor Lushington, Dr. George Macleod, Dr. Cowan, Principal Sir Alexander Grant, Principal Tulloch, and Dr. Burns, of Glasgow Cathedral, are favourable to the Acts. The professor concludes in a spirit of frankness and courage that we altogether miss in our statesmen—namely, that he is "prepared to prove that the majority of the most intelligent men in Scotland who have studied the question, including the leaders of our working men, who, as regards information, impartiality, and, consequently, authority, occupy a somewhat different position from the mobs who have been led to stultify the elections at Newark, Newport, and Colchester, are in favour of the Acts." The journal from which we are quoting also contains a communication from the Rev. W. Simpson, that is, in our opinion, altogether admirable. The want of courage manifested by members of Parliament on this subject is anything but creditable to them; for, as the *Saturday Review* remarks, they are quite ready to declare that if such and such things cannot be proved to the satisfaction of the Royal Commission, they will consent to the abolition of the Acts, but they never assert, on the other hand, that if the verdict of that Commission be a favourable one, they will advocate the continuance of the measures.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

AT the ordinary meeting on Tuesday night, the Royal Medical and Chirurgical Society heard and discussed papers by Dr. Althaus and by Dr. Hilton Fagge; the former descriptive of a case of complete paralysis of an arm, both as regards motion and sensation, attributed to neuritis affecting the brachial plexus, and successfully treated by the use of the continuous current of a sixty-cell Daniell's battery; the latter on some cases designated by the author "Sporadic Cretinism." Dr. Althaus's paper was followed by considerable discussion.

The annual general meeting was held, according to custom, on Wednesday. The ordinary routine business was somewhat prolonged by a discussion on the proposal of the Council to abandon the publication of the "Proceedings"; and an amendment to remit the matter to the Council for reconsideration, with a view to the continuance of the Proceedings in an improved form, was carried by sixteen votes to fifteen. The other recommendation of the Council, to take October into the session instead of June, was carried unanimously. These questions being disposed of, the retiring President read a farewell address, in which he embodied brief notices of those Fellows of whom the Society has been deprived by death during the year. Among the names were those of Copland, Syme, Chowne, Mayo, Moore, Nunneley, and others. To each Dr. Burrows paid an eminently judicious and fitting tribute; but upon the memory of Mr. Moore, his own pupil, and one of the warmest supporters and most active Fellows of the Society, he dwelt with peculiar respect and tenderness. He then acknowledged his indebtedness to the office-bearers, and spoke in terms of high commendation (which called forth a warm response from his audience) of Mr. Wheatley's very valuable services. He referred to the somewhat stormy discussions upon the abortive amalgamation scheme; and, in conclusion, gracefully expressed a hope that he might be excused for the firmness with which he had maintained the prerogatives of the Chair. Dr. Pitman moved the vote of thanks to the retiring President, and the request that the address might be printed, and in doing so bore testimony to Dr. Burrows's zeal and discretion at the Council table. Of his demeanour in the meeting-room the Fellows are all qualified to judge; and we do but express the universal feeling when we say that, in very trying times, the Presidential chair has been filled with a dignity and a wisdom that could not have been surpassed.

In the course of the evening the ballot-box was examined by the appointed scrutineers, and the Council list of office-bearers for the ensuing year declared elected. Dr. Burrows will therefore be succeeded by Mr. Curling, and the retiring medical secretary, Dr. William Ogle, by Dr. Symes Thompson.

THE ARMY MEDICAL SERVICE.

WHILE we accord the present Director-General all the credit that may be due to him, we confess that the present state of his department in the matter of promotion cannot be regarded with entire satisfaction. While men are entering in at the portals of the department, we do not hear of anything being done to maintain a healthy circulation within it by opening exits in the way of retirements from the senior ranks. The stagnation in the medical service resembles that of another scientific corps, the Royal Artillery. If the army medical department is to continue to attract young medical men of the right stamp, some scheme must be devised for accelerating promotion. We earnestly trust, if the Government measure of army reform passes the Houses of Parliament, that the authorities will perceive the necessity of making posts for the senior medical officers in the different military districts that are to be mapped out in this country. Not only would the Government and the nation be greatly benefited by having such men scattered about the country as medical inspectors in connexion with the militia and reserve forces and the recruiting services, but an outlet would be afforded for many deserving officers who now continue to serve on without much, if any, hope of future advancement for themselves, and with injury to the interests of their suffering juniors. We have, on more than one occasion, indicated a direction in which the way to promotion might be secured—namely, by making retirement in the inspectorial ranks compulsory after certain fixed dates, and we venture to hope that the hint may be taken. If inspectors-general of hospitals had to retire after a certain number of years' service in that rank they would simply be placed in a parallel position to that of general officers commanding districts who only hold their commands for definite periods. The regulation would be no harder in the one case than in the other, and it is certainly every bit as requisite.

THE SANITARY STATE OF BIDEFORD.

THE high death-rate of the town of Bideford during the December quarter for the three past years, especially for that of 1870, when it amounted to 82 in the thousand of population, having attracted the attention of the Health Department of the Privy Council, Dr. Thorne was sent down to make an inquiry into the nature and causes of it. A large number of the deaths had resulted from typhoid fever, whooping-cough, and other preventable diseases. It was clearly time for the institution of a Government inquiry, if we may trust the report of the proceedings of a recent meeting of the Town Council published in the *North Devon Journal* of February 11th. If the Bidefordians used to congra-

tulate themselves on the healthy nature of their pretty little town, they can do so no longer, for its sanitary condition is in many respects extremely bad. Dr. Thorne soon discovered the presence of causes sufficient to account for the prevalence of typhoid fever, which had resulted from accumulated pollution that destroyed the purity of the air, soil, and water, brought about by defective drainage, or rather, by the absence of all drainage in the town. In many instances the cottages were completely sodden with pollution and filth which found its way into the walls; whilst another cause of evil was that of allowing the sewage to fall outside the Quay and the Pill, causing an intolerable nuisance, which was dangerous to the public health. Dr. Thorne quoted, at a meeting of the local authorities, a number of special cases taken at random from his observations, the details of which are so bad as to be scarcely credible: soil impregnated with excrement, closets and pigstyes in the foulest condition, and in disgusting proximity to overcrowded sleeping-places and sleeping-rooms of the inhabitants, and wells placed so near to the latrines as to render the soakage of their contents into the water a matter of certainty. Indeed, the tainting of the water with sewage products was evident in some cases. Dr. Thorne had no difficulty in making numerous recommendations, and the sooner the local authorities carry these out the better for the credit of themselves and the town. At the request of the mayor, the clerk read the resolutions that had been passed by the Board to improve the condition of the town, showing that waterworks were in course of progress, and drainage works were to be commenced at once. All we can say is, there is probably no town in which these are more urgently needed. Mr. G. Heard remarked that there was a place not far from the Town Hall that had been complained of for thirty years, where the privy was less than four feet from the front door, and yet the Board had been unable to get two medical gentlemen of the town with sufficient moral courage to say it was not fit for human habitation. If this be the fact, we are sorry to hear it; but the Government inspector, at any rate, has not lacked this moral courage, and he will be rendering everybody a further service by insisting upon the speedy execution of the sanitary measures to which he has called attention.

THE COMPETITIVE EXAMINATION FOR THE MEDICAL SERVICES.

AT the late competitive examination for the medical departments of the public services, which commenced on Monday last at the London University, there were 57 candidates for the army, and but 14 for the navy. In the former, 57 gentlemen competed for 36 appointments, and 53 of them obtained more than the requisite number of marks qualifying for entrance. We are informed that this batch was a very good one, and that it numbered several men of really high attainments, both professional and general. It was, we believe, at the instigation of the present Director-General that candidates for the army medical service have had the option of passing examinations in modern languages, German and French, in addition to that in natural history. Twenty-eight candidates expressed a desire to be examined in one or other or both of those languages. We regard the introduction of this innovation with considerable satisfaction. An acquaintance with them is every day becoming more requisite, especially to army men, who may at any time be detailed to proceed to or across the Continent; and Sir Galbraith Logan has herein the credit of being in advance of the Medical Council and Examining Boards. At the end of the week's examination, it was found that the first two on the list were graduates of Edinburgh, while the fourth passed highest in the optional examination for French and German. With the training these gentlemen will have at Netley, and subsequently in the army at home and abroad, in subjects of practical hygiene, in addition to those of a more strictly medical character, we may fairly look to army medical officers to fill some of the posts in connexion with State medicine.

MEDICAL SOCIETY OF LONDON.

A GENERAL MEETING of this Society will be held for the election of officers and other business on Monday next, the 6th of March, at 7 P.M.; the ballot will close at 8 P.M. The meeting will then be made of an ordinary character, and discussion be first taken on Dr. Crisp's paper "On Small-pox and its Prevention," read at the last meeting. The treasurer states in his report that, after making due allowance for all liabilities, there will remain in hand, on the 1st of October next, a proximate amount of £228 9s. 1d.; but he points out to the Society that the increase over previous years is due to a large accession of country members, who only pay an entrance-fee, and who will not be added to the Society in the future in such large numbers as hitherto. Nevertheless, he sees every cause for congratulation in the present financial prospect of the Society. The ninety-eighth anniversary meeting will be held at Willis's Rooms on Wednesday, March 8th, at 6.30 P.M. The dinner will be held at 7 P.M. Mr. Gay will take the chair, and we are quite sure that he will be well supported. His occupancy of the presidency of the Society has been marked by signal success, and he has set an excellent example in the exhibition of punctuality, tact, and courtesy.

REGISTRATION OF DISEASE.

DR. PHILIPSON'S Report on the Health and Meteorology of Newcastle and Gateshead during the closing five weeks of 1870 contains the announcement that the series of disease returns which have been for several years prepared by him, and published from time to time under the auspices of the Northumberland and Durham Medical Society, is now closed. In consequence of the expense attending the collection and publication of the returns, the Society has at length felt it expedient to discontinue them; and thus one of the most creditable and successful of the independent efforts which have been made for the registration of disease has had to be abandoned, after having demonstrated the perfect practicability of the method adopted. To Dr. Philipson and his coadjutors the gratitude of all who are interested in this most important subject is eminently due. If anything should occur to frustrate the hope which Dr. Philipson expresses, "that some means will be adopted by the State to carry out the public registration of diseases throughout the kingdom," he will have the satisfaction of knowing that, whatever form opposition to the principle involved may take, it certainly cannot pretend, in the face of the Newcastle series of returns, to doubt the complete adaptability of the means employed to the end desired. And what has been accomplished at Newcastle could just as easily be done for the whole kingdom, if the State would provide the necessary machinery for collection and publication, and a little of the "needful" in addition.

THE PRESENT EPIDEMIC OF SMALL-POX.

ON Wednesday next, the 8th instant, the subject of the present epidemic of small-pox will be brought before the Epidemiological Society by the President, Dr. Seaton, and by Dr. Grieve, the medical director of the Small-pox Hospital at Hampstead; and we are requested to state that the Society invites the attendance of all who take an interest in the subject. We commend this invitation to our readers.

It will be of importance at the present moment, when the sufficiency of the Vaccination Act of 1867 is under the examination of a Parliamentary Committee, to learn what teachings are to be derived from the existing epidemic of small-pox in the estimate of the physician (Dr. Seaton) who speaks with evident knowledge and a grave official responsibility on the subject, and from the physician (Dr. Grieve) who has had the largest experience in the charge of cases in the course of the epidemic. We trust that the invitation of the Society will be largely accepted, particularly by those members of the profession who believe that they can throw light upon the causes which have interfered with that thorough working of the Vaccination Act that had been hoped for by its promoters.

EDINBURGH ASYLUM FOR THE INSANE.

THE annual report submitted to the managers of this institution shows that, on December 31st, 1870, the daily average of inmates was 733 in number, as compared with 732 at the same date in 1869. The income during the past twelvemonth was £25,279 10s. 5d., and the expenditure £23,448 8s. 7d., leaving a balance of £1831 1s. 10d. This year's balance was £536 less than last year's, owing to the reduction in the rates. During 1870 new additions to the asylum were completed at a cost of £4486 16s. 3d., and twenty patients received benefit from the charity fund, the average allowance being £11 15s.

To supply the vacancies caused on the medical board by the deaths of Sir James Y. Simpson and Mr. Syme, Drs. Christison and Alexander Wood were appointed.

According to Dr. Skae's report, 739 patients, exclusive of 15 absent on probation, were inmates of the asylum at the close of 1869. During 1870 the admissions were 265. The removals during the same period were 229, of whom 118 were discharged "recovered," giving the percentage of 44·5 recoveries on the number of admissions; so that, although the admissions are slightly less than those of 1869, the recoveries in proportion to the admissions are greater. The remainder of the report is of local rather than of general interest, but its tenor is such as to show the continued efficiency of the great Edinburgh Asylum under its present management.

LORD DERBY ON SICK CHILDREN'S HOSPITALS.

FEW men outside the profession have a finer appreciation of sanitary laws than Lord Derby, whose speech at the recent anniversary dinner in aid of the funds of the Hospital for Sick Children was as important in its way as his other speech at the opening of the Stanley Hospital at Liverpool. Remarking on the inferiority of the town to the country in the matter of health, he proceeded to show that this, though a strong, was not the sole reason for founding hospitals in our populous centres for the diseases of children. The tie of neighbourhood is never felt in a city of three millions as it is in a country village, where everybody knows all about his neighbours, and charity goes direct from the giver to the receiver. Organised relief is demanded in great cities, where infant mortality is so high and the need for checking or diminishing it so urgent. Nor should it be argued, in abatement of children's hospitals, that with a diminution of infantile death-rates we should be overdone with a population that could not find employment. Emigration will always counteract such an evil, and all the more that energetic workmen of the poorer class are beginning to appreciate the advantages which a colony presents. Reverting to the particular institution in whose behalf he was pleading, he congratulated its supporters on the steady, if slow, advance it had made. Additions to the building, though expensive, will be covered by the yearly income, which in 1870, without including the balance from the year before, was £10,600. Though often poor, the hospital has never been in debt; but the need for augmenting the donations increases with the number of inmates. Seven hundred in-patients and twelve thousand out-patients were under treatment in the year 1868; while, in addition to the new hospital, there is one for convalescents at Highgate, holding from fifty to sixty patients, and always full. But, laudable as are these arrangements, how can they cope with the incessant waste of infant life—a waste heavier than that occasioned by the most sanguinary war? What are two hundred beds to all the mass of disease and suffering in London? But the hospital is a beginning, and therefore better than nothing. Support it, pleaded his Lordship, and our money or sympathy will not be thrown away. Support it, and we shall have done good to those whom we relieve, good to the public at large, and good above all to ourselves.

NATURE OF ADDISON'S DISEASE.

IN a very exhaustive paper on this subject in Virchow's *Archiv*, in which the author appears to have carefully collated and studied almost every case recorded both at home and abroad, Dr. Rossbach, of Würzburg, arrives at the following conclusion:—Addison's disease is a neurosis—that is to say, an affection not at present anatomically demonstrable, but a functional disturbance of the whole nervous system, which stands in close but not in absolutely essential relation with the suprarenal capsules, and is characterised by serious perturbations of the psychical powers, very strongly marked anæmia, extraordinary debility, and very frequently also by a dark pigmentation of the integument (bronzed skin).

BRITISH MEDICAL BENEVOLENT FUND.

AT the usual monthly meeting held on Tuesday last the committee granted relief to the extent of £60 to nine applicants, while two other cases were postponed for further inquiry. Two names were also added to the list of candidates for annuities.

A special vote of thanks was passed to Dr. Thorne Thorne, who has acted as honorary financial secretary for the past three years, but retires on his appointment as medical inspector to the Privy Council. Mr. Charles S. Webber, F.R.C.S., has kindly undertaken the duties of the office vacated by Dr. Thorne.

The following gentlemen have recently consented to assist the committee by acting as honorary local secretaries for their respective neighbourhoods:—Dr. Cocks, Ross; Dr. W. Vawdrey Lush, Weymouth; Dr. J. Thompson, Bideford; Mr. E. Pye Smith, Hackney; Mr. F. Salzmann, Brighton; Mr. W. Bale, Stockport; and Mr. H. Stear, Saffron Walden.

THE CONCEALMENT OF SMALL-POX.

WE regret to learn how completely Mr. Goschen has been misled as to the causes which lead to the concealment of small-pox. He stated that "such was the extraordinary feeling which he was almost glad to find still existing amongst the poorer classes with regard to parochial relief, that many of the families concealed from the relieving officers the fact that small-pox existed in their homes, though they had to pay private medical men small sums for their visits and medicine." Unfortunately the explanation is far more selfish in its nature. The laundress in the crowded court knows that her little income would immedi-

ately cease if it were known that she had a case of small-pox in the house. The baker takes very good care to conceal the fact that one of his apprentices is covered with the eruption. The workman knows that he will be at once discharged from the printing-house or factory if it were known that his wife has just been sent to the hospital. But the greatest obstacle of all is found in the objection to part with a child upon whose face the mother may never look again. The rich, who can isolate their patients, know none of these reasons for concealment, but Mr. Goschen must indeed have faith in the reports of the relieving officers if he believes that there would be any substantial objection to receive assistance so imperatively required, if it could be given with a kindly and efficient hand.

THE SUSSEX COUNTY HOSPITAL.

THIS valuable charity appears to be in a flourishing condition, as the report at the annual meeting last month shows an ordinary income of £7987, against an expenditure of £7940, thus leaving a balance, small it is true, but such as many metropolitan charities would be only too thankful for. We regret, however, to notice that it was necessary to sell out £1500 of consols in order to pay arrears of last year, and the available funded property has thereby been reduced below £1000. A very small effort on the part of the wealthy inhabitants of Brighton would soon put their hospital in a perfectly satisfactory financial position.

The number of in-patients during the year was 1375, giving a daily average of 136; and the number of out-patients 5849. We are glad to notice that the governors have exercised a wise and liberal policy in erecting a museum and library for the use of the medical officers and pupils of the institution, and they may rely upon it that the money thus expended will not have been thrown away.

DEATH BY STARVATION.

IT is extremely gratifying to observe that greatly increased attention is being paid by the Poor-law Board to the verdicts of death by starvation. Not long ago inquiries were held by the inspectors in the Holborn Union, and last week a letter was addressed to the Guardians of Islington requiring an explanation as to the death of a man named Denton, who had "starved to death" on the usual allowance for out-door paupers—namely, 4s. per week for himself, aged seventy-two, and his wife, aged fifty-five. We trust the inquiry will be pursued, and that some explanation will be required as to the extraordinary statement made by the chairman of the board of guardians—namely, that it could not be too well known that the guardians did not give out-door relief sufficient to entirely maintain persons or they would have no one in the workhouse. Is this conforming to Mr. Goschen's interpretation of their duty that they should give "adequate" relief, or none at all? No wonder that new workhouses are wanted if the object of the guardians be to fill them up under the pressure of "inadequate" relief.

"OUT-PATIENTS WANTED."

IN face of the very general complaints of the abuses inseparable from the present indiscriminate administration of out-patient hospital relief, it is, indeed, curious to find an instance where the absence of out-patients is regarded as a very serious defect. And yet this is the case of the Blackburn and East Lancashire Infirmary. Hitherto a limited number of out-patient tickets have been awarded to each governor, but the number having fallen off, it was proposed to throw open the out-patient department, or, in lieu of this, to give each governor the privilege of sending as many patients as he pleased. The proposal was postponed for twelve months, and in the meantime we hope that the governors of the hospital will have the opportunity of perusing the report which is about to be presented by the London committee having this subject in hand.

GRAPE SUGAR IN NORMAL URINE.

M. HUIZINGA (*Pflüger's Archiv für Physiologie*, Dec.) demonstrates the existence of grape sugar in normal urine by the employment of Wolframic (tungstic) and molybdic acids. He shows—1. That urine freed from indican, uric acid, and colouring matter, contains a substance which is capable of effecting the reduction of molybdanic acid. 2. Grape sugar reduces this acid also. 3. Urine free from indican, uric acid, colouring matter, *and sugar*, is no longer capable of reducing molybdanic acid. *Ergo*, the reducing substance is grape sugar.

THE SANITARY INQUIRY AT LIVERPOOL.

DRS. PARKES and SANDERSON commenced their inquiry into the various matters complained of in THE LANCET Report on the Sanitary State of Liverpool on Thursday, the 23rd ult. We shall look for their report with considerable interest, as several questions of a most important practical bearing have to be determined—viz., the propriety of using ashpit refuse as the foundations of dwelling-houses; the success of trough waterclosets; the ventilation and flushing of sewers; and the general sanitary condition of the houses and their inmates.

EDINBURGH INFIRMARY.

THE managers met on Monday, the 27th ult., when a prolonged discussion took place as to the sale of the Infirmary grounds and buildings to the University. Ultimately a vote was taken, and a motion was carried by a majority of ten to five that the grounds and buildings be sold to the University for £25,000.

Again the subject of the education of females had to be postponed, on account of the extreme length to which the previous discussion had gone.

IT is worthy of remark that, while the Birmingham guardians will do nothing in the matter of amended relief to the out-door sick, the guardians of the neighbouring town of Wolverhampton have resolved to introduce the dispensary system. We may also state that Mr. Fairlie Clarke will read a paper on the "Medical Aspects of Pauperism" at the Charing-cross Hotel this (Friday) evening at 8 o'clock, and that a deputation from the Poor-law Medical Officers' Association and the British Medical Association will have a conference with Mr. Simon at the Privy Council Office on the 4th inst., at 1.30 P.M. We understand that Dr. Rogers, at the next general meeting of the Poor-law Medical Officers' Association, will give a description of the Irish medical relief system, its advantages in economising life and Poor-law expenditure, and what ought to be avoided if the same system should hereafter be introduced generally into this country.

CONSIDERING the great prevalence of infectious diseases at the present time, it is not surprising that the troops should come in for some share of them. From the paragraphs that have appeared in the papers, we imagined that there was a serious outbreak among the troops quartered in the Raglan Barracks, Devonport; but we find that the outbreak in question amounts to two cases of small-pox in the 2nd (Queen's) Regiment, both of which are mild, one of the patients being a recruit recently arrived in the garrison.

THE Executive Committee of the "Marshall Hall Memorial" fund have decided, as the Royal Society of Medicine is not forthcoming for the purpose, to request the Medico-Chirurgical Society to undertake the administration of the trust, in accordance with the wishes of the subscribers to the fund, as expressed at their last meeting held some few months since.

WE are glad to hear that the Sharpey Memorial Fund now amounts to £1904, and that efforts will be continued to add to that sum. A portrait of Dr. Sharpey is to be painted by J. P. Knight, R.A., to be placed in University College, and the fund for the endowment of the scholarship will be shortly transferred to the Council of the College.

WE are authorised to state that Mr. Henry Arnott, assistant-surgeon to the Middlesex Hospital, is not a candidate for the vacant assistant-surgeoncy at St. Thomas's Hospital.

No action has as yet been taken in Holborn and Clerkenwell for the erection of disinfecting apparatus. The matter is under consideration, and it is possible that the apparatus will be ready for the next epidemic.

WE are given to understand that the example set by University College Hospital in the erection of an efficient service of medicinal and other baths is likely to be followed in the new building of St. Thomas's Hospital at Stangate.

THE vestry of St. Luke's have erected an iron hospital in the neighbourhood of Golden-lane, and have fitted it for the reception of thirty cases of small-pox.

PRIVY COUNCIL SANITARY REPORTS.

WE have before us reports recently made by Dr. Buchanan and Mr. J. Netten Radcliffe on the sanitary state of the parish of St. Just, in Cornwall, and of the town of Glastonbury, in Somersetshire. It need hardly be said that some special manifestation of unhealthy condition was the moving cause in both instances of the inspectors' visits. Scarlet fever, epidemic throughout the whole country, has fallen with such severity on St. Just and Glastonbury as to render an investigation by the Medical Department of the Privy Council imperative. We cannot help the inclination, as we look through these two reports and observe how they just repeat the oft-told story of filth and foulness, to throw them aside in sheer despair. What can be more disheartening, for example, than Mr. Radcliffe's statement that, although "so far as Glastonbury is concerned, the Sanitary Act might never have been passed," the "serious default of duty" chargeable upon the corporation "is to be assigned to ignorance of the full requirements of the case and of the duties which have been imposed upon the corporation regarding sanitary matters rather than to apathy"? Four years after the Sanitary Act has become the law of the land the municipal authorities of an ancient historical borough containing 4000 inhabitants are discovered to be "ignorant" of what that law entailed upon them as the guardians of the sanitary interests of their town. If these things are done in the green tree, what is likely to be the case in the dry? Surely there is little room for wonder how it is that the Registrar-General finds the death-rate steadily and constantly increasing in the small towns (Glastonbury ranking in that category) and rural districts, while in the larger, densely-populated cities and towns, where natural advantages are pretty well neutralised by mere aggregation, the mortality is "kept down within its old limits." In the latter, more or less perfect organisation for sanitary purposes is provided, conditions unfavourable to health are sought to be eliminated, and, notwithstanding the rapid growth of population, the death-rate, if not actually decreased, is, at any rate, restrained in the tendency to increase, which would soon be manifest if sanitary work was neglected. But, as regards the small towns and rural districts, there is no escape from an increasing death-rate for them so long as the utter want of sanitary organisation which the Privy Council inspectors found existing at St. Just and Glastonbury is (as we have small doubt it is) their general characteristic. Dr. Buchanan observed at St. Just an almost universal foulness of soil and air about houses, an absence of any decent means of excrement-removal, a scanty and impure water-supply, and many other conditions of unhealthiness; and co-existent with these he found a vestry which had accepted the provisions of the Sanitary Act long ago (apparently late in 1866 or early in 1867), but which, nevertheless, had "effected no sanitary improvement worth mentioning"—a fear of unpopularity and a fear of expense being seemingly the explanation of this inaction. At Glastonbury, Mr. Radcliffe found that the loss of life from enteric fever during the five years 1865-9 was in proportion nearly one-third greater than it was in the crowded city of Bristol during the same period, and that the fatality of diarrhœal diseases was relatively the same in both places. It is estimated that had London suffered as severely in proportion to population from the cholera epidemic of 1866 as did Glastonbury, the fatal cases in the metropolis, instead of numbering, as they did, 5548, would have been 15,000. Mr. Radcliffe calls these facts "scandalous," and we do not know who will differ from him in so regarding them. He says the water-supply is deficient, the sewerage altogether faulty (in fact "a curious piece of patchwork"), the arrangements for excrement-disposal "utterly bad," the removal of nuisances imperfectly carried out, and the construction of cottage houses "too commonly deplorably inadequate for the health requirements of families." It is needless for us to particularise the several recommendations of the inspectors for the two places visited; they are sufficiently obvious from the nature of the defects pointed out, and they involve no difficulties in respect of engineering and finance at all incommensurate with the means of the inhabitants. Of course if Mr. Radcliffe's theory as to the reason of the default of the Glastonbury authorities be correct, they will lose not a moment now that they have been enlightened by him in respect of what they ought to do.

We wish to say a word in conclusion relative to the publication and diffusion of these sanitary reports. It is impossible to over-estimate their value as monitors and instructors upon the great questions of public health, and the more widely and promptly they are circulated at the time of issue the better. We fear, however, that the petty economy, which seems to be the guiding principle now in regard to the issue of Government publications, is operating restrictively upon the distribution of these sanitary reports. That it is not always easy to obtain them is a fact, and one much to be regretted as we think. Why do they not appear in the annual report of the medical department? Surely it would not be more expensive to publish them year by year as appendices to Mr. Simon's reports than it is to continue publishing coloured diagrams of spectrum analyses which only a very few can possibly appreciate. But, at any rate, they should be published in some form which would enable persons interested in them to obtain copies by purchase if necessary, and the simplest way of accomplishing this would be to convert them into Parliamentary papers, to be presented as a series under an order of the House of Commons, just as most of the Poor-law Board returns are presented. We commend this suggestion to the consideration of Mr. Simon.

THE VACCINATION COMMITTEE.

THIS Committee assembled on Tuesday last under the presidency of the Right Hon. W. E. FORSTER.

MR. CANDLISH, M.P. for Shields, was the first witness. He stated that he had moved in consequence of a judgment delivered in the Court of Queen's Bench, authorising the magistrates to impose repeated fines for non-compliance with the order for vaccination. He was a member of the

Committee on Vaccination in 1866, and had an impression that it was only intended to fine defaulters once. He had also received numerous complaints as to the oppressive action of the law, the fact being that vaccination was objected to by individuals belonging to every grade of society, on conscientious grounds. He gave the case of a Mr. Toulson, of Leeds, who had been summoned twelve times and fined four times for refusing to have his child Sophia vaccinated, and at length the child was sent away to escape the action of the law. He also quoted the case of a newsagent living near Chesterfield, who is now undergoing imprisonment in Derby gaol. He had been summoned thirteen times for refusing to have his children vaccinated, ten times he had been convicted in twelve months; his goods had been repeatedly distrained for the payment of fines and costs, and, no more goods being forthcoming, he was now in gaol. This person did not belong to the most ignorant class; he was a member of a religious body, and bore a most excellent character. In another case a parent had been fined to nearly £50. And yet, spite of all, the intention of the law, which was the vaccination of the child, was in none of these cases fulfilled. He had fifty cases similar to those he had adduced. The guardians and magistrates in some cases endeavoured to mitigate the severity of the penalties, whilst in others they appeared to be excessively severe. Mr. Candlish stated that the question is, whether the protection afforded by vaccination is complete or only partial? If complete, no one suffered from the infringement of the law but the unvaccinated. If partial, why should there be compulsion? He was himself an advocate of vaccination. His children and grandchildren were vaccinated, but he objected to what might be perpetual imprisonment for conscience sake. He thought a compulsory law necessary in order to bring up the indifferent, but that the fine should be limited to 30s., and should be inflicted only once. He was of opinion that no English House of Commons would give powers to vaccinate children by force, and the present compulsory law as applied to parents failed to secure the vaccination of the child.

Dr. COLLINS, of St. Pancras, was then examined, and if the anti-vaccinationists have no better evidence than he adduced, their case is even worse than we supposed. He attributed high infant mortality to vaccination. He said that one third of all vaccinated children suffered from either eczema, pyæmia, phagedænic ulcers, or other forms of constitutional disorders. He roundly stated that vaccination had nothing to do with the diminished mortality from small-pox in Ireland and Scotland, or anywhere else, but that it was to be accounted for by the discontinuance of inoculation, by improved sanitary arrangements, and superior medical treatment.

It is sad to think that the time of so many intelligent members of the House should be wasted in listening to such rubbish.

THE SMALL-POX EPIDEMIC.

PROGRESS OF THE EPIDEMIC.

THE mortality from small-pox has again risen in London from 218 to 227. It is a strong evidence of the inadequacy of the hospital accommodation that only 44 of these deaths occurred in the nine permanent and temporary hospitals now devoted exclusively to small-pox. Even if we deduct the 86 deaths of children under five years of age on account of the difficulty in treating them in hospitals, there still remain 97 deaths of adults who have been treated either in their own homes or in crowded workhouses. If we put down the mortality at only 15 per cent., there must be at least 1200 persons awaiting removal. This estimate is fully endorsed by the returns which have been forwarded from various medical officers of health. Dr. Bateson writes that the want of hospital accommodation is deeply felt in Southwark. Of 30 fresh cases in Hackney only 4 have been sent to hospital; of 29 in the city, only 4 also. There has been some diminution in the number of fresh cases in Holborn and St. Luke's, the total being 17 last week, in the place of 37 the week before.

THE SMALL-POX RELIEF FUND.

It would seem that the President of the Poor-law Board professes very little faith in the authorities of which he is the head, as we observe that Mrs. and Miss Goschen are in the list of subscribers to a fund the objects of which are nearly identical with the duties imposed on guardians of the poor—viz.: 1. To supply with food and necessaries at their own homes those for whom, thanks to the want of energy of the proper authorities, immediate accommodation cannot be secured. 2. "To obtain homes and other necessary hospital accommodation," and this although it is admitted that it ought to be done by the Metropolitan Asylums Board and vestries. 3. To organise an efficient staff for finding out cases, and removing them in proper ambulances; and of course, in doing this, to supersede the action of the guardians, and to allow them to continue the use of old cabs. 4. To assist families not paupers, and to replace clothes and bedding which may require to be destroyed; this being the special duty of vestries and local boards. 5. To provide convalescent hospitals, which, as they are undoubtedly as essential as hospitals for the acute cases, ought equally to be provided by the public authorities.

We have no desire to discourage private benevolence, but if the epidemic cannot be dealt with by the proper sanitary and relief authorities, our prospects are, as *The Times* observes, gloomy indeed, since it is hopeless to expect that the exertions of a few benevolent ladies, or the generosity of a benevolent public, will meet the difficulties. Personal service should in such an emergency be the most acceptable contribution towards relief, and we should be indeed glad to find that there was some machinery by which devoted self-denying Christian men and women should be able to place their services at the disposal of the authorities. The visits of a few such persons would do more than a host of paid officials to secure for the sufferers the necessary food and treatment which the guardians would be bound to supply, and also the performance of those sanitary operations which tend to prevent an extension of the epidemic.

TEMPORARY ACCOMMODATION IN ST. LUKE'S WORKHOUSE.

On Wednesday evening a report was presented from Dr. Bridges, Poor-law Inspector, on the overcrowding and filthy condition of the wards devoted to small-pox. A committee of the guardians more than confirmed the statement of the inspector. There are 42 patients in rooms wholly unadapted for the treatment of contagious diseases, the cubic space of which would not be sufficient for 30 patients. The bedding was in a disgusting state, and had been used for successive patients without washing or disinfection. The stench was abominable, and there is a poor lunatic in confinement in the wards because the authorities at Hanwell and Colney Hatch refuse to receive him. There was a great want of attendants, several having positively refused to remain, and the arrangements for washing and disinfection were most imperfect. The guardians had already resolved to memorialise the Metropolitan Asylums Board, and they will attend on Saturday for that purpose. In the meantime they gave orders to engage sufficient helpers, and to have the whole of the beds and bedding changed.

THE "DREADNOUGHT" AS A SMALL-POX HOSPITAL.

Considering the urgent requirement of more hospital accommodation for small-pox patients, we cannot understand the objections made to the use of the *Dreadnought*, if not for acute cases, at least for convalescents. We have the best authority for stating that the old ship would accommodate 100 patients at the rate of 2000 cubic feet each, besides the necessary staff, and it must be observed that the isolation would be perfect. It is possible, however, that better use would be made of her by employing her as a convalescent hospital. The removal of 200 patients from the existing hospitals would go a long way towards providing for the deficiency which may remain after the hospitals are fully opened on the 6th inst.

A SUGGESTION.

We should have thought that, under so great a pressure, it would have been desirable for the Metropolitan Asylums Board to meet weekly instead of fortnightly.

SMALL-POX IN LIVERPOOL.

Bad as was the epidemic of relapsing fever in Liverpool, that of small-pox is far worse. The annual death-rate from this one disease is at this moment nearly as high as the annual death-rate from all causes of a healthy country town—viz., 12·9 per 1000. There are at present 200 cases of small-pox in the workhouse; 405 persons have been admitted into the Ashfield sheds, and of them 105 died. These were the very worst cases, and many were sent in a dying condition. Dr. Gee stated that no patient was discharged until all traces of the disease had passed away, and until the patients had had two baths in Condy's fluid. No patient to his knowledge had taken the disease home to his family.

WANT OF A PUBLIC MORTUARY.

At the Health Committee, Dr. Trench related some appalling instances of the necessity for mortuaries. Wakes were held over persons who had died of small-pox. At one house, a dozen persons, all intoxicated, were found holding a wake at midnight in a room where lay the body of a woman who had three days before died of small-pox. In a cellar a child died on the 17th, and the wake was held on the 20th ult. The father, mother, and four of the brothers and sisters lived by day and slept (?) by night in the cellar with the corpse, which became extremely offensive before burial. In another case the infected bedding was sent to a pawn-shop. We fear a like inquiry in certain parts of London would reveal a similar state of things. Mortuaries are the exception, not the rule.

Correspondence.

"Audi alteram partem."

STATE OF THE METROPOLITAN WATERS.

To the Editor of THE LANCET.

SIR,—It is now upwards of twenty years since I first applied the microscope to the determination of the suspended organic matter, dead and living, present in certain waters used for drinking, and especially in the river waters with which London is chiefly supplied. This application of the microscope revealed at the time some startling and highly practical results; and I am very glad, therefore, to perceive that Dr. Frankland has recently made use of this means of determining the condition and quality of the waters supplied by the Metropolitan Water Companies.

As complaints of the state of these waters have for a long time past been very rife, I have just subjected them to microscopical examination, and with the following results, which I believe to be both interesting and important.

The Grand Junction Company.—This water was very free from sediment, but it contained numerous infusoria and an abundance of diatomaceæ belonging to different species and genera, also a little thallus of a fungus.

The West Middlesex Company. — Also very free from sediment, but contained infusoria of several well-known species and genera, and much thallus of fungus; no diatomaceæ were seen.

The Chelsea Company. — Contained an evident sediment, and numerous small infusoria, with some diatomaceæ.

The Lambeth Company. — Contained sedimentary matter, infusoria of several species and genera, numerous diatoms, and much thallus of fungus.

The Southwark and Vauxhall Company. — Contained very much sedimentary matter, and infusoria of several species and genera; it abounded in diatoms of numerous species and genera, in fungus, in the spicules of the fresh-water sponge, and in particles of vegetable tissue; indeed, so numerous were the living productions present in this water that a volume might be prepared and written descriptive of them.

The New River Company. — Contained only a very small quantity of sediment, and a few infusoria and diatomaceæ, with threads of fungus.

The East London Company.—Contained numerous infusoria of several species and genera, as well as many diatomaceæ.

Now, on comparing these results with those arrived at from the examination of the water of those companies which some years since drew their supply of water from between the London bridges, a very great improvement becomes manifest. At the same time it is an improvement in amount rather than in kind. The same elements of impurity are present for the most part, though in less quantities, and in most of them living productions still so abound that, relying on the evidence derived from the microscope alone, I should not hesitate to condemn them as unfit to be used in their natural state, and as delivered to the consumers for drinking purposes.

Further, I would affirm, if disease in any form be due to the presence in drinking-water of organic germs, that the processes of purification to which these waters are subjected are inadequate to their exclusion from the waters the results of the examination of which I have above recorded.

I am, Sir, your obedient servant,

Adelphi-terrace, Feb. 1871. ARTHUR HILL HASSALL, M.D.

CLUB PRACTICE.

To the Editor of THE LANCET.

SIR,—The question of club practice having been of late prominently brought before the profession in your excellent journal, and especially in your admirable leading article of the 18th of February, I am inclined to request insertion of a few remarks on the subject. Forty years' experience of club practice has enabled me to judge in some degree of its advantages and disadvantages.

To a medical man whose time is of any value, club practice is disadvantageous, and I quite agree with you that he who takes a club at a low rate to serve as a stepping-stone to practice does himself no benefit in the end, and injures his profession. The only exceptions are where the medical man is an officer of a union, and where a club is composed of the families of the labourer who would, in case of illness, be entitled to an order for medical relief, or of those who are just above this condition, where it would be irksome to keep petty accounts, with a remote chance of being paid. Club practice of any other description is disadvantageous and unremunerative. I have attended club members at a charge varying from 2*s.* 6*d.* to 14*s.* per member, but at any sum below the latter I have reserved a veto upon the persons to be attended. It is well known that individuals well able to pay become members of clubs solely for the sake of medical attendance. A club member who considers he has paid for medical attendance does not hesitate at any hour, day or night, under a trifling ailment, to send for the doctor, where his neighbour, not in a club, and having to pay, would pause. To obviate this, and to reconcile the just claims of the medical man with the means and ordinary necessities of the members of a society, the following ingenious but somewhat complicated plan has been adopted by the Honourable and Rev. S. Best, who has taken great interest in the club question:—A sick member may consult any medical man who accepts the club tickets, which are red, blue, and white. These are issued to the members, who pay 3*d.* for red, 2*d.* for blue, and 1*d.* for white. The red is given to the doctor on his visit (if a visit be given), the blue on attending at the surgery, and white on an extra supply of medicine. The medical officer receives 2*s.* for red, 1*s.* 6*d.* for blue, and 1*d.* for a white ticket; 6*d.* extra is added if the patient lives three miles from the medical officer's residence. It is presumed that, as the member will have to pay for extra attendance, he will not send for trifles. The plan is said to work satisfactorily, and Mr. Best is entitled to our thanks for his appreciation of our position and for his attempt to remedy the difficulty. I presume it is not impossible to calculate the equitable value of medical services, but this has not yet been done.

In contemplating the club system and its evils, the melancholy fact obtrudes itself—viz., that we have the remedy in our hands, but lack the courage to apply it. Let me illustrate the truth of this by bringing before the profession a most glaring example.

The Hampshire Friendly Society was established in 1825, and boasts of H.R.H. the Prince of Wales as its patron, two bishops as vice-patrons, and lords and right honourables as trustees. It possessed, in December, 1869,

£42,361 16s. as capital, and saved in that year £4465, which was invested. It numbers 4300 members. This club is perhaps one of the soundest and best of its kind, but there has been an obstacle to its extension here and there, owing to the refusal of some few medical men to attend the members at 4s. per head per annum. In my own district, for instance, the society until lately was little known. Some years ago, one of the supporters of the club, a country magistrate, invited me to attend the members in my neighbourhood at 4s. each. On learning the names of these I turned to my ledger, and satisfied my visitor that I should be a loser of something like £10 a year by such a contract, and therefore declined it. The list contained a builder, a farmer, an innkeeper, and a mechanic. Recently there has come into my district a gentleman who, wishing to benefit the agricultural labourer, and finding the rotten old village clubs falling to pieces, has made praiseworthy attempts to extend the county club. I was applied to as before, but in vain; my objections were listened to and considered reasonable. I offered to take the club at 6s. per member, provided I had a veto on the persons entering. An application to the managers was made, but the proposal was refused, the reason assigned being that no exception could be made in my case, as all *the other medical officers willingly accepted 4s. per head.* The district manager, finding my refusal to attend an effectual bar to the extension of the club, has guaranteed the moderate terms required by me, and the society is flourishing.

My curiosity was excited to learn who and of what description of men the society's officers were composed, men who placed their services at so low an estimate. I was prepared to find the list composed of juniors in the profession, of men who would exclaim, "My poverty but not my will consents,"—of those just commencing practice, who take clubs as a stepping-stone; but no! the great majority of the club medical officers are men of standing in the profession, of professional reputation, and many of them hospital or infirmary surgeons!—and these gentlemen content, nay willing, to attend the members of a club (including persons able to pay) having a capital of £42,000, and saving £4000 per annum, for 4s. per head per annum! If I blushed for my profession when I was told "your brethren are satisfied," I own to a feeling of mortification after examining the list of the society's medical officers.

If my facts and conclusions are false, your journal is open to the sixty surgeons of the Hampshire Club to correct them. I trust my letter may be the means of rousing these gentlemen to a sense of the duty they owe to their profession, if they have chosen to undervalue their own services.

I hope to hear of a meeting ere long, and of a remonstrance to the managers of the society; I believe such application would be attended with success, and tend to the well-being of the club.

I remain, Sir, your obedient servant,

L. OWEN FOX, M.D.

Broughton, Winchester, February 20th, 1871.

COLOUR OF THE EYES OF THE NEWLY BORN.

To the Editor of THE LANCET.

SIR,—Dr. Wiltshire will be interested in learning that the observation which he has made as to the colour of the eyes of the newly born, and which he has recorded in your number of February 11th, was made so long ago as by Aristotle. "The eyes," says this writer, "of all newly born infants are light blue, but at a later period change their colour, assuming what is to be their proper hue. This phenomenon does not occur in any marked degree in other animals than man. A light blue colour is a sign of weakness, and it is because the parts of infants are weak that their eyes are invariably of this colour and never of any other." (De Gener. v. 1.)

Some time ago I took the trouble of examining into the accuracy of this statement, and found it so far true, at any rate, as to hold good in the case of such few babies as I observed. Dr. Aubert, however, states that infants are sometimes, though rarely, born with brown eyes. He does not state whether he has himself seen such a case, or, if not, what is his authority.

I would point out that it is not only the eye which in infants is comparatively destitute of pigment, but that the same deficiency extends at that age to other parts of the body. This is the case with the skin and hairs, and also with the olfactory region of the nasal cavities. Very probably it is the case with all pigmented parts. I have attempted elsewhere (Med.-Chir. Trans., 1870) to connect hypothetically this deficiency of pigment in the olfactory organ of children with the comparative dulness of their sense of smell.

As regards other animals than man, Aristotle seems to allow that a similar darkening of the eye may occur, though in an inferior degree. It is, however, certain that it does sometimes occur in them in as striking a manner as in man. Thus kittens are always born with blue eyes, and usually develop a dark pigment in the iris at a later period. In an instance recorded by Sichel, this change of colour commenced four months after birth.

I am, Sir, your obedient servant,

Clarges-street, Feb. 1871. WILLIAM OGLE.

THE MEDICAL CLUB.

To the Editor of THE LANCET.

SIR,—Before entering upon the new era in the Club's history, which will date from its removal to Pall Mall East, allow me to call attention to the following statement of facts.

The purchase of the lease of the new premises will cost £2000, the furniture and fittings another £2000, and the stock, &c., about £1000. I think it is worthy of consideration at the present time whether the profession would prefer to raise a fund of £5000 and take the Club into their own hands. Should such a resolution be come to within the next three months, I shall be quite prepared to withdraw from the proprietorship on the 29th of September next, that being the date at which the lease of the present premises in Spring-gardens will terminate.

I am, Sir, your obedient servant,

February 22nd, 1871. LOBY MARSH.

CAN THE DEAD CONVEY INFECTION?

To the Editor of THE LANCET.

SIR,—As every instance in point is serviceable towards the settlement of the important question raised by Dr. Wilks, I report the following as I received it on hearsay evidence from the late Mr. Richard Deane of Knutsford, a gentleman whose professional attainments were well known to Sir Henry Holland. A man died of malignant typhus at Knutsford. His body was sealed up as soon as possible. Three brothers from a distance came to the funeral. They insisted upon seeing the corpse of their dead brother. The coffin was opened. The stench was insupportably sickening. Every one of the three brothers shortly was taken ill of typhus and died.

I give the story as told to me on his own knowledge by Mr. Deane.—I am, Sir, your obedient servant,

C. RADCLYFFE HALL, M.D.

Derwent House, Torquay, Feb. 27, 1871.

To the Editor of THE LANCET.

SIR,—In answer to the question raised by Dr. Wilks "Can the dead body convey infection?" I would place the following on record.

In 1853 a solitary case of small-pox of an aggravated type occurred in the wards of the Bristol Royal Infirmary, in a patient under the care of Dr. William Budd, terminating fatally. That gentleman being anxious to have a post-mortem examination, my brother and I volunteered to make one. We both took the disease; he had it mildly, but with me it proved confluent; and, worse than all, my sister caught it and barely escaped with life; in her case the eruption being suppressed, three or four pustules alone appearing.

I may add that we had all been vaccinated and showed good marks, that neither my brother nor I had been exposed to the contagion during the patient's lifetime, and that I had had the disease before.—Faithfully yours,

Vernlew House, near Oswestry, Feb. 13th, 1871. WM. K. BROCK.

IRELAND.

(FROM OUR SPECIAL CORRESPONDENT.)

THE SEWAGE OF KINGSTOWN.

A FEW weeks since I commented on the unsatisfactory state of the drainage of this town in reference to an epidemic of typhoid fever very prevalent there. Since then I am happy to state that, at a late meeting of the Town Commissioners of Kingstown, a report of the Sanitary Committee was brought forward, and unanimously adopted, recommending that £1500 should be expended in the construction of drains and other works necessary to the proper sewerage of the township. This is a step in the right direction, for up to the present the sanitary condition of the town has been a disgrace to the authorities.

SKIN-GRAFTING.

At a late meeting of the Surgical Society of Ireland a paper on this subject was read by Mr. E. Hamilton. His first case of skin-grafting was unsuccessful, but the second turned out favourably. In the latter the pieces of skin snipped off were not simply laid on and covered by plaster, as in the first case, but were inserted by little nicks into the granulations, and kept in their places by isinglass plaster, thereby rendering them less liable to be disturbed and washed from their position by the discharge. This is, I believe, the first successful case of skin-grafting which has taken place in Ireland.

SMALL-POX IN BELFAST.

From a report of the Inspector of the Belfast Union, I find, in reference to small-pox, that he considers the epidemic commenced on the week ending the 26th March last, and since then there have been 180 cases treated in the workhouse, of whom 115 were vaccinated, and 65 not vaccinated. Of this number 104 have been discharged, 10 had died, and 66 remained under treatment when the inspector visited the hospital on the 9th ult. Of the 10 fatal cases 8 are said to have been vaccinated, but the inspector thinks there is reason to doubt whether, in many of the cases said to have been vaccinated, the operation had been perfectly performed.

FRENCH RELIEF FUND.

A committee of Fellows, Professors, and Students of Trinity College has been formed to raise a special fund for the relief of distress among the French. The Bank of Ireland and the Corporation of Dublin have also liberally contributed to the relief fund, the former in the sum of £250, and the latter by a donation of £500.

Obituary.

JOHN ADDINGTON SYMONDS, M.D., F.R.S.E.

BUT a few months ago, when the profession and, indeed, the world at large, were mourning the death of Sir James Simpson, an accomplished correspondent sent us two finely-conceived and elegantly-worded sonnets on the event, little prescient that much of their tenor would so soon be applicable to himself.

> "He hears no clamour of polemic fray,
> Nor recks he what unthankful men may say;
> Little can vex him in that sleep profound,"

is now true of John Addington Symonds, though the "polemic fray" in which he was wont to mingle never aroused any emotion inconsistent with honourable scientific controversy, and though few physicians, even in life, had less reason to dread the comments of "unthankful men." Probably no medical practitioner of our time ever conciliated more friendships, or inspired a wider respect for his character, his professional accomplishments, and his refined tastes than Dr. Symonds, who so long represented in the provinces the science, the skill, and the liberal culture which are generally, but wrongly, supposed to be confined to the metropolis.

John Addington Symonds entered on the study of medicine under happier auspices than the πολλοί of the profession. He was born on the 10th of April, 1807, in the city of Oxford, where his father was held in much esteem as a general practitioner. His preliminary education was pursued at the grammar school attached to Magdalen College, and in his seventeenth year he began to qualify himself for his future vocation. In addition to the constant surveillance exercised over his studies by his father, he enjoyed the advantage of attending the anatomical courses of Dr. Kidd, the Regius Professor of Medicine in the University, and the lectures delivered on chemistry by Dr. Daubeny. At the Radcliffe Infirmary he acted as dresser to Mr. Hitchings; and in 1825 he matriculated at the University of Edinburgh, then, even more than now, a centre of scientific, and particularly of medical, proficiency and education. There he inspired the best of his teachers with the happiest augury of his future; and when, in 1828, he obtained the *summos in medicinâ honores*, few graduates left their Alma Mater better fitted to reflect lustre on her traditional fame. He settled in Oxford as assistant to his father, and superintended the practice of the Dispensary and Lying-in Institution. Three years' active experience as a general practitioner were the prelude to his removal to Bristol, where he was appointed physician to the General Hospital, and became, what he always aspired to be, was best fitted for, and ever afterwards remained, a consulting physician.

Dr. Symonds married in 1834 the daughter of James Sykes, Esq., and in the same year obtained the lectureship of Forensic Medicine at the Bristol Medical School. This appointment he exchanged in 1836 for that of the Practice of Medicine, a course which he opened with his high-toned lecture on "Medical Study," and continued to give till 1845. In 1839 he delivered at the annual meeting of the British Medical Association the address in Medicine—a composition long remembered for its philosophical spirit, its practical usefulness, and its refinement of language. The office of physician to the Bristol Hospital interfering with his growing practice in consultation, he resigned it in 1848, and was immediately elected honorary and consulting physician to the hospital. In 1851 he settled in Clifton, always a resort of the invalid, and destined to become a favourite one under his skilful and genial presence.

In 1853 he was made a Member, and in 1857 a Fellow, of the Royal College of Physicians, at which institution he delivered in 1858 his elaborate Gulstonian lectures on "Headache." In 1863 he acted as President of the British Medical Association, then sitting at Bristol, and in that capacity delivered his address on the "Public Estimate of Medicine," long recognised by all enlightened physicians as perhaps the most successful "Apologia pro vitâ suâ" ever published. In 1869, when the Social Science Congress met at Bristol, he contributed most effectively to its transactions, which were also exceptionally favoured by the communications of Dr. William Budd.

In the intervals of professional business he found time to keep himself (what few active physicians can, without mockery, be designated) a man of letters. He was an excellent classical scholar; well read in the literature of modern Europe, and versed in the subtle principles that underlie the fine arts. Humboldt's celebrated aphorism: "Cherish the Beautiful; the Useful will take care of itself," was the realised faith of Dr. Symonds, who combined in a degree seldom found in members of any calling the proficiency of a master in his profession with the many-sided culture of the votary of literature and art. No contemporary physician ever received so many tokens of extra-professional esteem. Principal Forbes, of St. Andrews, dedicated to him his celebrated treatise on the true theory of the Glacier. Mr. Conington, Corpus Professor of Latin in the University of Oxford, dedicated to him his masterly translation of the Odes of Horace. His pen was rarely inactive in the higher fields of medical speculation and induction. Between the years 1833 and 1838 he contributed to the "Transactions of the Provincial Medical Association" papers on the "Medical Topography of Bristol"; on "An Exhumation after Poisoning"; on "The Cholera in Bristol in 1832"; and his "Retrospective Address on Medicine." For the "Cyclopædia of Medicine" he wrote the article "Tetanus," and for the "Cyclopædia of Anatomy and Physiology" the articles "Age" and "Death." He was an able coadjutor of Sir John Forbes in the pages of

the "British and Foreign Medical Review," where his criticism of "Carswell's Elementary Forms of Disease" and his letters on "Excessive Trust of Nature," in reply to the positions of the editor and of Dr. Andrew Combe, attracted much notice at the time. Dr. Tweedie's "Library of Medicine" was also deeply indebted to him, not only for the "Pathological Introduction," but for the majority of the articles on "Diseases of the Digestive Organs." In the Societies his presence was always welcomed; but with the exception of his valuable paper on "Death from Chloroform," read before the "Harveian" in 1856, his contributions were principally made to the proceedings of the British Medical Association, or to those of the Literary and Philosophical Society of Bristol. In the archives of the latter body may still be consulted, with pleasure as well as profit, his lectures on "Our Institution and its Studies"; "Ten Years, a Retrospect"; on "Habit, Physiologically considered"; on "Dr. Prichard"; on "Sleep and Dreams"; and on "Waste." The tone of all these compositions is singularly elevated and pure; and their language, though taken from the "well of English undefiled," is yet imbued (as the late Lord Derby said of the true classical scholar's style) with the flavour of the "Heliconian spring." When the time has come for collecting them, these papers will form a book of sterling and substantial interest; while their severer tenor might be pleasantly relieved by inserting, like flowers in the niches of a colonnade, some of those delicate sonnets and poems, original or translated, which lie scattered through the albums of his innumerable friends. In independent authorship he is represented by his finished essay on the "Principles of Beauty," published in 1857, in which he vigorously combats the theory of Jeffrey, and contributes most ably to the view embodied in the well-known treatises of Mr. D. R. Hay, of Edinburgh.

Dr. Symonds died at his residence, Clifton-hill, on Saturday, the 25th ult. Exhaustion, induced by repeated attacks of diarrhœa, was the proximate cause of his decease. His last hours were cheered by the presence of his family; while it cannot but have been a consolation to him to reflect that his name would be honourably perpetuated by his son, Mr. John Symonds, sometime Fellow of Magdalen College, Oxford, and by his brother, Mr. Frederick Symonds, the able and accomplished practitioner in that ancient university town.

DR. MATTHEW WILLIS
(OF AYSGARTH).

THIS able and valued practitioner died suddenly on the 5th of February, 1871. Dr. Willis was one of those men, happily not rare in our ranks, who in the midst of a wide and laborious practice, and far away from large towns, yet never forget the higher side of their calling, and keep up a warm interest in the science of their profession. It seemed almost by a cruel jealousy of nature that he was cut off by a disease in the investigation of which he was actively engaged. It is but a few months ago that he communicated to the present writer some of his experience of enteric fever. Dr. Willis had been led to believe that in more than one case he had seen this disease propagated by contagion; and he was also engaged in searching into its apparent "spontaneous" origin in some isolated settlements. The result of these important inquiries we shall now never know.

Dr. Willis is widely and deeply regretted as one whose friendship and activity reached far beyond his professional relations, and he will be remembered by Edinburgh men as the Gold Medalist in 1854 for his thesis on Goitre. His many friends have decided to erect to his memory a window in that church, in the Dale, in the restoration of which he had taken so great an interest during his life.

E. BEVERLEY BOGG, M.D. ST. AND., M.R.C.P. EDIN., M.R.C.S., &c.

WE deeply regret to announce the death of Dr. E. Beverley Bogg, of 47, Finborough-road, Brompton, which occurred somewhat suddenly on Wednesday, March 1st, after a fortnight's illness, from congestion of the lungs. Dr. Bogg was for eight years assistant-surgeon in the Royal Navy, and retired on half-pay two years ago, in consequence of impaired health, the result of dysentery in China, diphtheria, and other illnesses occurring in the course of his naval career. Shortly after settling in Brompton he was appointed physician to the Chelsea, Brompton, and Belgravia Dispensary, and bade fair, by energy and love of his profession, to rise to an honourable position in private practice. But it was otherwise determined. The death of Dr. Bogg, though it will extremely distress those who had the pleasure of knowing him, was the less remarkable as for some time he had laboured under disease of the heart. We are amongst the number who mourn over the death of Dr. Bogg at a comparatively early age. He was a genial, gentlemanly man, whom it was pleasant to know. His observations in China, Mexico, and other places which he visited while in the navy were those of a man of unusual intelligence and scientific culture. He had many accomplishments, and could write a Latin letter or catch a Mexican air and reproduce it on the piano with equal ease. He was the son of Mr. John Bogg, surgeon, and once mayor, of Louth, and leaves a wife, a mother, and two brothers, members of the profession, to feel impoverished by his death.

WILLIAM RICHARDSON, L.S.A.

ON Saturday last Mr. William Richardson, died at his house in Stockton-on-Tees, of paralysis, at the age of fifty-seven. For upwards of thirty-five years he had resided and practised in that town, in which he was deservedly popular, not only from his professional acquirements, but from the geniality and kindliness of his character. He was mayor of Stockton in 1857-8, and alderman and J.P. for many years, taking an active share in all public matters. Highly successful as a practitioner, especially in medical cases, he was also conspicuous for his devotion to all manly sports, and a testimonial of the value of a hundred guineas was presented to him in 1856, in recognition of his services as a patron of English games. He was principally instrumental in reviving Stockton Races in 1859, and an enthusiastic supporter of the cricket club, famous in the north of England, of which, from its establishment twenty-six years ago, he was president up to the time of his death. In Mr. Richardson the town of Stockton has lost not only an able medical practitioner, but a man whose warmth of heart and unaffected charity endeared him to all classes of society. He was an ardent promoter of soup-kitchens for the poor, and foremost in all schemes for the amelioration of their condition, and in him they have lost an earnest friend. His personal popularity was unbounded, and even his political opponents forgave his unswerving Toryism, so genial and so kindly was the "Doctor," as he was always called, though he did not of course claim that title for himself, having simply the diploma of the Society of Apothecaries. We should add that he was educated at University College, was a member of the British Medical Association, honorary surgeon to the Stockton Dispensary, and a steadfast supporter of the Royal Medical Benevolent College.

COLLEGE OF SURGEONS.

AT the meeting of the Council, held on Thursday, Mr. Solly's resignation as a member of the Board of Examiners was accepted. Mr. Solly trusted, however, he would be able to resume his attendance at the Council Board in the course of a few months.

After other matters, the draft scheme for an Examining Board in England, prepared by the Committees of the Royal Colleges of Physicians and Surgeons and the Society of Apothecaries, was taken into consideration.

An amendment to the proposal that the Council do agree to the first resolution—viz., "That one Board of Examiners, in this division of the United Kingdom, be appointed by the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Society of Apothecaries of London, for the examination of candidates who desire to practise medicine, surgery, and midwifery,"—was moved by Mr. Simon, and seconded by Dr. Humphry, to the

effect that the Council of the College do remit the scheme to the Committees for further consideration, especially in respect of two points: the one being that it leaves to the Colleges of Physicians and Surgeons the power of granting licences to practise through diplomas for the Fellowships respectively; the other that it excludes the Universities from any participation in the appointment of the Board.

After an animated discussion, the amendment was carried by a majority of one; the "ayes" being Mr. Simon, Dr. Humphry, Mr. Birkett, Mr. Hewett, Mr. Curling, Mr. Lee, and Mr. Lane; the "noes" Mr. Busk, Mr. Hancock, Mr. Holden, Mr. South, Mr. Hilton, and Mr. Wilson.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Feb. 23rd:—

Bradley, John Perry, Birmingham.
Drew, William Thomas, Stoke-on-the-Weld.
Fordham, John William, Stepney.
Moore, Arthur Jackson, Debenham, Suffolk.
Reed, James, Stoke, Devonshire.
Williams, Henry, Gloucester.

As Assistants in Compounding and Dispensing Medicines:—

Margetson, James Francis, Aylsham, Norfolk.
Turdle, James Henry, Chatham, Kent.

The following gentleman also on the same day passed his first professional examination:—

Spencer, Edward Richard, University College.

NAVAL MEDICAL SERVICE. — The following are the names of the successful candidates who passed the recent competitive examination for admission into the Medical Service of the Royal Navy, held at the University of London between the 20th and 27th of February, in the order of merit in which they passed, and with the number of marks obtained:—

	Marks.
Thomas Harvey, Westminster Hospital	1770
William Algeo, Royal College of Surgeons, Ireland ...	1720
Michael Kearney, M.D., Queen's College, Cork	1515
John Lyon, M.B., Glasgow University	1365
William Brown, Carmichael School of Medicine, Dublin	1340
John Tyndall, Royal College of Surgeons, Ireland ...	1340
Mathew Reed, M.D., Queen's College, Galway	1315
Alex. Richard Joyce, Royal College of Surgeons, Ireland	1255
Chas. Atkinson Rathborne, M.D., Queen's Coll., Galway	1245
Thomas Fower, Queen's College, Cork	1225

DR. H. CHARLTON BASTIAN will read a paper "On the mode of origin of Bacteria, and on the bearings of this question upon the science of Medicine," at the next meeting of the West Kent Medico-Chirurgical Society, to be held at the Royal Kent Dispensary, Greenwich-road, on Friday evening next, March 10th, at 8 P.M.

DR. W. A. GREENHILL, of Hastings, the author of the medical articles in Smith's Classical Dictionaries, and the editor of "Theophilus Protospatharius," receives the special thanks of Professor Jowett, for his contributions, on subjects of medical interest, to the Professor's translation of the "Platonic Dialogues."

THE next meeting of the Hunterian Society, on the 8th inst., will be devoted to a general discussion on the subject of Small-pox and Vaccination. The Society meets at 8 P.M., at the London Institution, Finsbury-circus, and members of the profession interested in the subject are invited to attend.

THE ROYAL ASYLUM OF THE ST. ANNE'S SOCIETY.—At a late meeting of the Council the rules were altered so as to allow of the appointing of two honorary physicians, instead of one; and Dr. William Miller Ord was thereupon appointed, jointly with Dr. John William Ogle.

HYDRATE OF CHLORAL IN SEA-SICKNESS. — Dr. Döring says, in the *Wien. Med. Woch.*, that he has found this salt useful to prevent sea-sickness. It does not possess any specific properties, but throws into a peaceful sleep, without the after effects of opium or chloroform. He gave from forty-five to sixty grains per dose.

AT a late meeting of the Longford Board of Guardians, the salaries of the three dispensary medical officers connected with the union—namely, Drs. Wilson, Slevin, and Peter, were increased by £20 a year.

Medical Appointments.

ARCHER, H. R., M.B., L.R.C.P.I., M.R.C.S.E., has been appointed Medical Officer for District No. 1 of the Royston Union, vice R. Pyne, M.R.C.S.E., resigned.

BALDING, D. B., F.R.C.S.E., has been appointed Medical Officer for the Royston Union Workhouse, vice R. Pyne, M.R.C.S.E., resigned.

BOUTFLOWER, A., M.R.C.S.E., of Strangeways, Manchester, late Senior House-Surgeon to the Manchester Royal Infirmary, has been elected Honorary Surgeon to the Salford Hospital.

BRADY, Dr. D. F., has been appointed Inspector of Anatomy for Ireland, vice Sir James Murray, resigned.

BREW, H. B., L.R.C.P.E., L.R.C.S.I., has been appointed Medical Officer to the Wicklow County Gaol, vice A. Nolan, M.R.C.S.E., L.R.C.S.I., resigned, and since deceased.

DYTE, D. H., M.R.C.S.E., has been elected Medical Attendant to the Path of Rectitude Friendly Society, St. James's-place, Aldgate.

FERRIER, Dr., has been appointed Assistant Demonstrator of Practical Physiology at King's College.

GRAHAM, R. T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the West Hackney District of the Hackney Union, vice Geo. H. T. Jarvis, M.R.C.S.E., resigned.

HARRIS, H., F.R.C.S.E., has been appointed Certifying Factory Surgeon for the Redruth District, vice T. Michell, M.D., deceased.

HUDSON, R. S., M.D., has been elected Surgeon to the Druid Court of Forestry No. 3908, Redruth.

HUGHES, J. E., M.D., M.R.C.S.E., has been elected Medical Officer for the Denbigh District of the St. Asaph Union, vice T. P. Edwards, M.R.C.S.E., deceased.

MADDEN, H. J., M.D., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ballycastle Dispensary District of the Killala Union, Co. Mayo, vice W. H. Bourne, M.D., M.R.C.S.E., resigned.

RICKETTS, F. W., F.R.C.S.E., has been appointed Medical Officer to the Liverpool Printers' Sick Society, vice Hicks, resigned.

RUDGE, C. K., L.R.C.P.L., M.R.C.S.E., has been appointed a Resident District Surgeon to the Bristol Dispensary, vice S. Winter Fisher, M.D., M.R.C.S.E., entering upon private practice.

SAVILE, G. T., M.D., M.R.C.S.E., has been appointed Medical Officer for the Clarborough District and the Workhouse of the East Retford Union.

SETTLE, J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed House-Surgeon to the North Lonsdale Hospital, Barrow-in-Furness, vice J. B. Buist, M.B., C.M., resigned, and appointed an Hon. Surgeon.

SLEMAN, J. C., M.R.C.S.E., has been appointed Assistant House-Surgeon to the Kent and Canterbury Hospital.

STOKES, J. F., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Ballintra Dispensary District of the Ballyshannon Union, Co. Donegal, vice J. D. Condon, L.K.Q.C.P.I., L.R.C.S.I., resigned.

WAGSTAFFE, W. W., B.A., F.R.C.S.E., has been appointed Resident Assistant-Surgeon at St. Thomas's Hospital, vice J. Croft, F.R.C.S.E., now Senior Assistant-Surgeon.

WARD, H., M.R.C.S.E., has been elected Medical Officer for District No. 2 of the Norwich Union, vice G. S. Hutchison, M.R.C.S.E.

WELLS, J. S., M.D., has been appointed Consulting Ophthalmic Surgeon to St. Leonard's Hospital, Sudbury, Suffolk.

Births, Marriages, and Deaths.

BIRTHS.

LITTLEWOOD.—On the 27th ult., at East Circus-street, Nottingham, the wife of J. Littlewood, M.R.C.S.E., of a son.

LYALL.—On the 28th ult., at West Hartlepool, the wife of D. Lyall, M.D., Staff Surgeon H.M.'s Ship "Trincomalee," of a son.

MUNRO.—On the 18th ult., at St. Helen's, Melrose, the wife of Dr. A. B. Munro, of a son.

NUGENT.—On the 23rd ult., at Military-road, Colchester, the wife of H. Nugent, Esq., Army Medical Staff, of a son.

SHEPHERD.—On the 28th ult., at King Henry's-road, Hampstead, the wife of F. Shepherd, L.R.C.P.E., of a son.

TOWNE.—On the 24th ult., at Kingsland-road, the wife of Alexander Towne, M.R.C.S.E., of a son.

MARRIAGES.

PEART—MACKINTOSH.—On the 21st ult., at St. Marylebone, Robert S. Peart, M.D., of North Shields, to Margaret Ellen, only daughter of the late Andrew Mackintosh, Esq., of Trinidad, W.I., and London.

SMITH—WHITE.—On the 21st ult., at St. Olave's, York, S. Charles Smith, M.R.C.S.E., of Halifax, to Mary, daughter of the late Edward White, Esq.

DEATHS.

BRADLEY.—On the 20th ult., J. B. Bradley, M.D., of Hill-bank, Buxton, aged 80.

GEARY.—At Limerick, Wm. J. Geary, M.D.

GOLDER.—On the 19th ult., James Golder, M.D., L.R.C.S.Ed., of South Portland-street, Glasgow.

HEYWARD.—On the 22nd ult., G. P. Heyward, M.R.C.S.E., of Charnhill Hurst, Englefield-green, aged 62.

HUBERT.—On the 22nd of Dec., at Nelson, New Zealand, Theodore Kelsall Hubert, M.D., late of Billingshurst, Sussex.

MATHESON.—On the 26th of January, at Alexandria, John Matheson, M.B., C.M., aged 33.

MENZIES.—On the 17th ult., at Lothian-road, Edinburgh, Dr. Wm. Ingram Menzies.

RICHARDS.—On the 23rd ult., F. W. Richards, M.B., F.R.C.S.E., of Winchester, aged 29.

SYMONDS.—On the 25th ult., at Clifton, Bristol, John Addington Symonds, M.D., aged 63.

Notes, Short Comments, and Answers to Correspondents.

REVACCINATION OF PREGNANT WOMEN.

A CORRESPONDENT is very anxious as to the propriety of this practice, and to the following questions would like to receive answers from practitioners who can give them:—"1st. Have you seen cases of small-pox in pregnant women? If so, at what period of pregnancy, and what was the result to mother and child? 2nd. Have you vaccinated or revaccinated women in this state? If so, at what stage of pregnancy, and the result? 3rd. Have you met with children born with small-pox rash?" We should be glad to make our columns the medium of answers to these questions if they are put into short compass. Meantime we do not share the anxiety of our correspondent, and have no hesitation in saying that pregnant women should have the advantage of the protective and minor disease. More than one case has been reported to us during the present epidemic, in which an infant has been born with the small-pox eruption, the mother remaining free from it, doubtless owing to the protection of vaccinia. Our correspondent's objection is based on the theory that vaccinia is a form of variola. This may be true, and probably *is* so. But he forgets that it is a mild, harmless, and benignant form, with a minimum and optional amount of eruption; and that whereas testimony is unanimous as to the great fatality of severe small-pox among pregnant women, it is equally unanimous in favour of the revaccination of such patients. We must not be misled by a theory. It is all very well to say that vaccinia is a form of variola; but the one disease is trivial, and the other is in the class of cases under discussion full of peril. We may here say that we have ourselves tested the effect of perfect and severe vaccinia in pregnancy with satisfactory results, that revaccination of pregnant women has been extensively practised during the present epidemic, and that we have been kindly favoured with letters both from Mr. Cooly and Dr. Seaton, entirely approving of the procedure.

Dr. Laffan, (Cashel.)—We find it quite impossible to forward private answers. If our correspondent will have the kindness to furnish an occasional report of any case of interest, it shall receive consideration.

Veritas.—The best way to deal with such publications is to put them into the fire. Punishment would be thrown away upon the authors of them.

"A PROVIDENT DISPENSARY."

To the Editor of THE LANCET.

SIR,—As a constant reader for many years of your valuable journal, I venture to send a few remarks respecting the Northampton Victoria Dispensary, in answer to some statements made by the Hon. Sec. in your issue of Feb. 18th.

In the first place, I may state that the power of electing medical officers and others entirely rests with himself and brother-in-law, who, having been great subscribers, have a proportionate number of votes, and can thereby carry any election as they please.

2ndly. They admit members of a class much superior to what may be thought eligible—viz., a vast number with wages over £1 weekly, and even up to £2 or £3, particularly by a combined family's earnings, as some young women here earn over £1 weekly as machinists; also clerks, independent people, &c.; much to the injury of resident local medical men, Northampton being strictly a manufacturing town.

3rdly. The working of the medical department is principally by assistants at the present time, one medical officer having two acting as such to the dispensary (one supposed to be his partner), and another of the officers also having an assistant doing very much of the work; although the reason one medical officer left twenty-two years ago was because his assistant was not received. Another officer left at that time because he had a Women and Children's Club, composed of families of an Odd Fellows Society he attended, and the dispensary committee decided that he must give up one or the other, so he resigned the dispensary. The third medical officer also left at that time, not through any squabble, as stated, but merely because he had more work at that time than he could manage.

Now, the present state of things entirely excludes any rising medical man born and educated in the town, hospital, &c. For instance, recently a gentleman was asked to take office (feeling they could do as they wished), and he declined, being a pure surgeon. One aged medical man, Mr. Birdsall, lately died, who frequently declared that he was entirely ruined by the dispensary, and was for many months supported by his medical brethren. And no doubt at the present time it flourishes through the depreciation of others' practices; for small tradesmen of all kinds are received, who even employ men themselves, and it is on the *tapis* to receive house-dwellers paying from £16 to £20 rent, so that gradually the entire town of a certain class will be swamped into this great monopoly; for, of course, everybody is glad to get cheap medical attendance, and impose upon institutions. Public vaccinators lose at least £30 per annum through this dispensary alone.

Yours faithfully,

AN HON. SUBSCRIBER AND EX-COMMITTEE MAN.

Northampton, Feb. 22nd, 1871.

M. M.—It will in future be considered a remarkable fact in medical history that clinical examinations have formed up to 1871 no part of the examination of surgeons by one of our leading Colleges. But seeing that even the English College of Surgeons after the 31st of March is to test the knowledge of candidates by the practical examination of cases, it is happily unnecessary to insert our correspondent's letter.

Surgeon.—We fear "his poverty, but not his will consents," to what our correspondent justly stigmatizes as a scarcely professional act.

Craven.—The advertisement is "shoppy" and commercial in style.

THE FIREMAN'S AND MINER'S RESPIRATOR.

A Subscriber to THE LANCET.—Mr. Alfred King, M.B., of Balham, about twenty years ago invented a respirator for the use of firemen and miners, the object of which was to preserve persons from the effects of smoke and irrespirable gases by the generation of oxygen from materials in the mask and respirator worn by them. Our correspondent states that he witnessed the trial of a respirator for this purpose many years ago, and that it proved a success. We presume that it was the above-named instrument, made for the inventor by Messrs. Arnold and Sons, which we have been told has been in use in many places for some years. Our correspondent, however, had better apply to Mr. Alfred King for any additional information that he may require.

THE SALE OF WINES AND SPIRITS BY GROCERS, ETC.

To the Editor of THE LANCET.

SIR,—I had supposed that the facts contained in my letter on the above subject would have amply sufficed to convince any candid reader that the opportunities of indulgence are greater," and declares that in this I am mistaken. Here is his proof: "Public-houses were over plenty; every street in London is alive with them; every country village can show its two or three," &c. Now, even admitting that this is true (in reality it is not; there are hundreds of rural districts without a single public-house or beer-house), nothing but voluntary and determined blindness could prevent anyone possessed of ordinary intelligence from seeing that a great addition to the existing temptations to drinking must produce an additional amount of intemperance. "Public-houses were over plenty" prior to the passing of the Beer Bill of 1830. But would anyone have the hardihood to assume that the increase of beer-houses which took place during the succeeding ten years did not contribute to the great increase of drunkenness? Equally daring would be the man who should declare that the vast increase in the number of places for the sale of wines and spirits, and the increased consumption of these articles, has not contributed to the increase of drunkenness in our large towns. The professed object of the promoters of the Beer Bill was to diminish spirit-drinking. In like manner, Mr. Gladstone hoped that by admitting the lighter wines at a lower duty than the heavier ones, the consumption of the latter would displace that of the heavier ones, and also that of spirits. Now, we learn that during the year ending March 31st, 1870, the consumption of light and heavy wines was as follows:—

Containing less than 26 degrees of proof spirit	...	4,606,361 galls.
„ 26 and „ 42 „	...	10,015,062 „
„ 42 or more „	...	11,037 „

I find that, comparing 1861 with 1870, whilst there was last year about half a million gallons of the heavier wines drunk, there was an increased consumption of the lighter wines to the extent of about four millions of gallons. Then as regards spirits, so far from a decrease proportioned to the consumption of wine, there is a considerable increase. Total consumption of spirits in 1861 and 1869—

1861	...	24,801,863 gallons.
1869	...	30,114,624 „

I have not the means of ascertaining the increase in the number of licences granted to grocers and confectioners during the ten years, but it must be very great; for it is scarcely possible to find one of any size in our large towns where liquors are not sold. Now, when wines and spirits were only sold by publicans, no woman of any respectability would go to buy. Females were free from the solicitation to purchase, nor were they allured by the tempting display of liquors of various kinds, gaily and gorgeously labeled, and industriously advertised. But now, subjected to these strong influences on all sides, who can doubt that numbers of them daily yield to the arts of grocers and wine and spirit merchants, and become purchasers and consumers of the adulterated, deceitful, and infatuating liquors sold under the names of wines and spirits? Once the habit of drinking is commenced, in too many cases an appetite springs up, which grows by what it feeds on. The woman is a secret drinker at first, but an open and reckless one in the end.

During the last ten years there has been a considerable increase in the amount of drunkenness in all our large towns. I have been favoured with statistics by the chief constables, and beg to submit the results.

Apprehensions for Drunkenness.

	1861.	1870.
Liverpool	9,832	21,113
Manchester	2,284	11,083
Birmingham ...	1,196	2,294
Leeds	1,287	1,940
Bristol	560	1,042
Salford	550	1,611

It will be seen that we have here indications of increased drunkenness out of all proportion to the increase in the population.

"Oinos" takes exception to my statement that "one of the saddest facts of the present day is the rapid increase of intemperance amongst women." The following figures unfortunately put the matter beyond all question.

Females apprehended for Drunkenness.

	1861.	1870.
Liverpool	4,272	8,944
Manchester	491	2,662
Birmingham ...	330	571
Leeds	not given	397
Bristol	184	346
Salford	175	411

Now, I do not attribute the whole of the increase here shown to the sale of wines, spirits, &c., by grocers and confectioners; but it can scarcely be doubted that this has more than anything else contributed to increase the habit of solitary and secret drinking, and afterwards of open drunkenness. The sale of spirits by grocers, confectioners, and refreshment-house keepers ought to be wholly prohibited; the licence duty for the sale of wines ought to be trebled, and as soon as possible ought to be taken away from the three classes just named.

I am, Sir, yours, &c.,

Manchester, Feb. 16th, 1870. H. MARTIN, M.D.

THE SCOTCH QUARTERLY RETURN.

ENGLAND experienced a rate of mortality above the average in the last three months of 1870, while in Scotland the death-rate was 21·5, slightly below the average for the same period. The two divisions of the kingdom were, therefore, in opposite conditions as to mortality during the quarter. Scarlet fever was epidemic north as well as south of the Tweed, and small-pox showed a tendency to increase in Scotland as in England; but the Scotch Registrar-General is able to say, what his English *confrère* could hardly do, that the disease "appears to have been kept in abeyance by the perfect working of our Vaccination Act." Relapsing fever prevailed in some parts of Scotland, chiefly in the large towns, appearing alongside of typhus and enteric fevers. Dr. Stark observes of relapsing fever that, "though some in England have wished to style it 'famine fever,' its appearances in Scotland has had no traceable connexion with famine." The working classes, he says, have been in full employment, and wages high, whilst food of all kinds has been abundant, good in quality, and low in price. We may, however, point out that *general* prosperity is not inconsistent with hard times among certain classes under exceptional conditions; and it is conceivable that in large towns like Greenock and Glasgow, where relapsing fever prevailed, there may have been much destitution among the poor, while, taking the country as a whole, plenty was the characteristic of the season. There is a popular notion that the official mind has a natural propensity for independent action, and this is rather borne out by the fact that the Quarterly Returns of the Registrars-General for England, Scotland, and Ireland are each framed differently, and do not agree either in the nature or extent of their information. The English Return is undoubtedly the best of the three, and there can be no valid reason why the other two should not be required to conform to it.

Mr. Edward Chapman (Preston) and *Mr. Chas. Madden* (Bonn) are thanked for their communications, which shall have our attention.

REVACCINATION BY THE VESICATORY METHOD.

To the Editor of THE LANCET.

SIR,—I so entirely agree with the spirit of your strictures that I had already anticipated your criticism by an apology in the letters, which you have probably overlooked; but the occasion was exceptional, and, as I hoped, justificatory.

Having practised this method of vaccination for nearly twenty years, and in this interval taken very little pains to make it more generally known, I think I may be purged of the charge of any great desire for publicity. I suppose that during that period I have vaccinated some thousands of persons by this method; but in no instance can I remember the occurrence of pyæmic mischief or secondary abscess. To this experience, rather than to any recent cases, the remarks on criticise really applied. Yet it is a singular circumstance that out of the very few persons whom I have revaccinated by use of the lancet only in this present panic, I have had two cases of abscess following the operation. In one of these the revaccination was done from arm to arm, and from a healthy baby. I think this exceptional occurrence may fairly be set off against your solitary instance of inflammation following an avowedly careless practice of my method.

My desire in giving greater publicity to this excellent method of revaccination—for such I am bound to call it from its unfailing certainty—was never with any personal motive, and THE LANCET does scant justice to its own power and influence both over the profession and the public in comparing itself with any public journal for wideness of reach. What was wanted, in my opinion, was the promptness of the daily press to make known at once, in the very height and pressure of the necessity, that method of obtaining protection which a long and large experience had satisfied me as best of all. If I may judge from the numerous letters I have received from medical men in approbation of my plan of vesication, my honest wish has been attained; and it must not be forgotten that the subject of vaccination is, after all, by no means an exclusively professional subject, so that its discussion in the secular press is a more venial offence than would be that of most other medical topics.

My conjecture as to the probable existence of what I have called a "varioloid atmosphere" has received a singular corroboration in the experience of Mr. Blackman, the eminent public vaccinator, and of a large number of other practitioners.

I am sure no one would regret more than yourself the repression of any valuable method of protection against small-pox merely because of some informality in the manner of making it public; and I therefore beg, in conclusion, to be allowed to ask my medical brethren to give a fair trial to the plan I advocate.

I prefer preparing the arm with two small spots of empl. lyttæ on adhesive plaster to the use of the vesicating liquid. The "irritation" alleged to be produced by this is really quite insignificant, and I think *less* than the mechanical disturbance effected by the scrapings and incisions of the lancet. The result is in every way satisfactory. It is not in the least necessary to pay more visits to the patient than one or two; for the plaster can be put on by the patient on the night previous to the vaccination, and next day the operation is completed by the single visit of the vaccinator. The only risk is that you have already indicated, of blistering over too large a surface. I have been most precise in directing a spot not larger than a *large pin's head* to be vesicated.

Having thus broken ground in the lawful arena of professional discussion, I leave this subject to your readers, and make my bow, being always

Your faithful servant,

Sloane-street, Feb. 25th, 1871. ROBERT ELLIS.

"HOSPITAL SUNDAY" IN LIVERPOOL.

AT a meeting of the Committee last week a distribution of the sum of £4500 was made in the following proportions:—Royal Infirmary, £1440; Northern Hospital, £720; Southern Hospital, £630; Dispensaries, £495; District Nursing Society, £405; Ladies' Charity and Lying-in Hospital, £270; Infirmary for Children, £225; and the remainder among the smaller institutions. The total sum collected was £4740.

THE PROFESSION AT THE ANTIPODES.

WHILE anxious to cater as effectively as we can for our brethren at the antipodes, we would rather not be made the umpires of their local differences. "It's a far cry to Loch Awe," says the Scotch proverb; and we fear our still small voice would become yet more attenuated in the much farther cry to Melbourne. The *Age* newspaper of that city contains an amusing leader on a personal affair between Dr. Neild, of the *Australian Medical Journal*, and Mr. D. B. Reid (M.R.C.S. Eng., 1856), resident surgeon of the Geelong Hospital. So far as we can make out, the *casus belli* is quite extra-professional, while both parties have unfortunately betrayed symptoms of that moral epilepsy called "loss of temper." It is surely below the dignity of our calling for one of its members to caution another against writing satirical paragraphs, else "epistaxis and circumorbital ecchymosis might follow"; and for the other to retort that his enemy was a "sea-cook" or the son of one—we forget which. Does the youngest of our Australian colonies contain no court of medical ethics, to adjust personal differences, and render possible only the latter of the Horatian alternatives— "Cita mors venit aut *Victoria* lata"?

J. F. B., (Newington-causeway.)—Vaccine lymph, if procured in the proper way and employed by a competent vaccinator, can convey no infectious disease whatever—not even small-pox. The panic to which our correspondent alludes is groundless, and could never have arisen had not the care, now universally taken in procuring lymph, been on one or two occasions neglected. Even then, however, the results gave not the slightest justification to the ignorant outcry of the anti-vaccination propaganda.

A Subscriber B. Sc. is recommended to apply to Messrs. Williams and Norgate.

CHLORAL HYDRATE.

To the Editor of THE LANCET.

SIR,—I think the following case is worthy of notice, as it seems to show how greatly the effect of a drug may be modified by the vehicle in which it is administered.

My patient, a lady, has been taking thirty grains of chloral hydrate in flavoured syrup as a night draught for the past three months, with the effect of lulling neuralgic pain, so as to allow of pretty continued sleep. The influence of the drug has usually commenced about two hours after administration, and continued during the night without marked symptoms. Two nights ago I changed the vehicle (a strong syrup containing ten grains of chloral hydrate to one fluid drachm) for camphor water in the same proportion. The customary dose was taken, three fluid drachms by measure, in a wineglass of water. I happened to be in the room at the time, and was surprised by seeing the patient about fifteen minutes after taking the dose sink down on the floor (she was standing by the bedside at the time) in deep unconscious sleep, as though thoroughly under the influence of chloroform. I placed her on the bed. In about five minutes the respiration became a little troubled, and the teeth clenched, perhaps due to the smelling-salts and eau de cologne which I held to the nose. Gradually semi-consciousness returned, and after fifteen minutes the patient was sufficiently restored to sit up and to assist in finishing undressing herself for bed; but she was wholly unaware of what had occurred, and when in bed soon dozed off, but the sleep was much more ungenial than ordinarily. In the morning she complained that the chloral had not lulled the pain so effectually as usual, and that she felt more wearied. There was no nausea.

The chief points I wish to call attention to are, the sudden invasion of anæsthesia, and the danger of injury or of suffocation to the patient had she been alone; the fact that the dose was the same that had been taken for a long period, and therefore a dangerous result was the less to be apprehended. The cause of the unlooked-for occurrence was due to the vehicle, which favoured more speedy absorption than the syrup. The whole effect of the drug seemed to be expended in a single explosion, instead of, as formerly, being spread over a considerable period of time. The more tardy action of opium and other poisons when the stomach is full is well known. It would seem that in like manner the action of the chloral may be greatly modified if the conditions under which it is used are but slightly modified.

Yours obediently,

Chepstow-villas, W., Feb. 5th, 1871. H. FLY SMITH.

P.S.—I gave again last night twenty grains of the chloral in camphor water. Sleep came on, was deeper, and of shorter duration than with the syrup. The patient woke about 3 A.M., when the dose was repeated, the effect of the first dose having quite subsided, and the neuralgic pains being very severe.

"PURE VACCINE LYMPH" (?)

A CORRESPONDENT informs us that, being unable to procure vaccine lymph in sufficient quantity to meet the unprecedented demand for revaccination, he was induced a fortnight ago to answer an advertisement in *The Times*, headed as above, and requesting the enclosure of five shillings. By return of post "M.D., care of Mr. Charles, agent, 1, Red Lion-street, Holborn, W.C.," sent our correspondent four capillary tubes and twelve points, charged with "stuff," which he remarked at the time did not look like vaccine lymph. Six infants and twenty-six adults were vaccinated with it, and all the cases were unsuccessful! He, therefore, thinks it a duty to the profession to record these facts as a warning.

Dr. James Little.—We have already criticised such proposals.

HOSPITAL STATISTICS.

To the Editor of THE LANCET.

SIR,—Would you allow me a short space to urge the officials of hospitals to whom I have addressed circulars to return them to me filled up? The amount of information required is not difficult of access to them, and it is very important for the furtherance of the inquiry. I have already received a large number of returns, but there are some hundreds yet to receive; and I trust that as many who have not yet sent me back the circulars, and who may see this, will hasten to return them, and thus save time, and another already serious consideration, expense for postage.—Yours, &c.,

Birmingham, February, 1871. LAWSON TAIT.

TAR AS A PROPHYLACTIC IN SMALL-POX AND SCARLET FEVER.

SOME of this generation seem ready to second the late Bishop Berkeley in sounding the praises of "tar-water." Mr. John Wetherfield, of Henrietta-street, Covent-garden, writes to us, with the view of inducing other medical men to give a fair trial to a simple medicine, which, according to him, has apparently manifested what he terms anti-zymotic powers. He refers to the work published in 1774, under the title of "Siris," by Bishop Berkeley, on the use of tar-water in arresting the progress of an epidemic of small-pox that occurred in his Lordship's diocese. Our correspondent has no intention, of course, of advocating the use of tar-water in opposition to vaccination, which is, without doubt, the best antidote to small-pox; but he considers tar to be useful in preventing the spread of scarlatina and typhus. He administers it in the form of pills, made by adding powdered charcoal with mucilage to the tar—the finest Stockholm variety being the best for the purpose. The use of this anti-zymotic, though not intended as a remedy after the disease has been contracted, has in Mr. Wetherfield's experience, when regularly taken, prevented the spread of typhus fever in families where one or two members have been attacked before the tar was tried. After the pills were fairly in use, no other person, however much exposed to infection, has taken the disease. Subjoined are a few scarlet fever cases out of the many in which the plan is said to have been successfully tried. In no instance were the children or other members of the families sent away out of the infected houses:—

The family of Mr. P——, twelve children and servants. One only attacked. The remainder took the pills very regularly, and escaped.
Mr. S——, six persons. One case only.
Mrs. P——, a widow, with two children, all sleeping in the same bed. Only one attacked.
The family of Mr. C——, nine persons. One case only.
Mrs. M——, seven in family. One only attacked.
Mrs. J—— (same house as the last), four in family. Two cases before the medicine was taken, none after.
Dr. P——, eleven in family. One child had died before the anti-zymotic was tried, and two others were suffering under the disease when it was commenced. No other was attacked; but the tar was taken by all regularly.
Mrs. G——, four in family. One case only.
Mr. S——, eight persons. Only one attacked.

To this list our correspondent declares that he might add other cases; but these will, he thinks, suffice to show that the tar possesses the power he ascribes to it.

A Busy Practitioner.—We think that the first-named work is the most recent and complete in a scientific point of view; the second is probably the most practical and useful as regards therapeutics; and the third is less voluminous and complete than the first, but somewhat of the same character, and very full in pathology, morbid anatomy, and references to continental writers, especially those of the German schools.

Mr. J. Caldwell, (Shotts, Lanarkshire.)—Hansard's, Great Queen-street, London.

THE NAVAL MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Now that the naval medical profession is agitating for the establishment of a school on the Netley model, would you kindly point out the fact that some greater use might be made, with much benefit, of material already at hand.

At the Naval Hospital at Haslar there has been accumulating for many years, at the public expense, a most valuable library of books, both professional and on the allied sciences (more particularly on natural history), which are, so far as the medical officers of the port go, "sealed." The library is only open for a few hours daily, closed at 4 P.M., and *no books are allowed to be taken out*, and this for a reason unknown and unguessed by those interested. Those who know Portsmouth and the situation of the hospital will agree with me that more than ordinary zeal would tempt the student such a distance to study under such circumstances as there exist.

In the museum attached to the hospital there is a collection of specimens of considerable pathological importance, and in natural history an osteological collection of no mean value, which might serve a better end than to be preserved under glass for the gaze of the patients' friends. Many who know the cunning of the hand which prepared them would willingly see them at a higher premium, and of more benefit to the student.

Were the regulations regarding attendance upon operations properly enforced, an opportunity given of seeing interesting post-mortem examinations with demonstrations by a competent medical officer, and the books obtainable under usual library regulations, much would not only be learnt, but a thirst would be implanted for more (no mean desideratum in the naval medical service), and thus, without one farthing of expense, one step at least would be taken in the right direction.

I am, Sir, your obedient servant,
Portsmouth, February, 1871. GRADATIM.

CHEMISTS AS ALIENISTS.

Mr. Thomas Sankey Cooper, F.R.C.S., (Canterbury,) has courteously forwarded to us the certificate upon which he acted in regard to a man charged with damaging plants. The certificate is that of a surgeon, *and not of a chemist*. We are glad to find that we were in error, being misled by the report of a local paper. We have only to express regret at having been so misled in regard to a gentleman holding so honourable a place both in society and in the profession of which he is now a retired member.

Cymro should consult his medical adviser.

Mr. A. C. J. (Argyleshire) could not do better than procure Holmes's System of Surgery, and read it carefully, along with the works referred to at the end of the more important articles. The "diploma-dealer" of whom our correspondent speaks is a good specimen of the fungoid excrescence spawned by a rotten system of competition and "cram."

PATENT LATTICE LINT.

WE have been furnished with a specimen of this material. Lattice lint possesses the advantages of being cheaper and lighter than ordinary lint. It is of peculiar texture, and can be removed without any fluff or filaments adhering to the wound to which it has been applied; and it is asserted that it can be used repeatedly, after having been purified by boiling water and dilute carbolic acid or Condy's fluid. While we allow that the lattice lint has some advantages over the ordinary lint, we do not think that it can be said to be an effective substitute for it. From the looseness of its texture, a single fold does not take up and retain sufficient fluid or lotion; and if a wound had to be kept moist, it would be necessary to employ a double fold of the lint for the purpose. It stands washing well, and by means of this and a disinfectant it appears to lose completely any disagreeable smell that it may have acquired by being used as a dressing; but it does not regain its colour after it has been stained with some animal fluids.

Mr. G. D. H.—It strikes us that our correspondent was somewhat precipitate. The offensive action seems to have been that of the mother of the patient, who was evidently bent upon some private scheme of her own, and who had no authority. The wife was the responsible person, and our correspondent either should not have left the house without seeing her, or should have attended to *her* message of recall. Neither the patient nor his wife had done him any wrong, and it is a medical man's duty to stick to his patient without much regard to the acts of fussy or meddlesome relatives. The consultant was manifestly tricked into going up-stairs, and did not want the trouble of coming down again. A little more thought for the sick man, and a little less readiness to take offence at the acts of a person who might have been altogether ignored, would not only have avoided the trouble, but would have defeated the old dame instead of playing into her hand. If our correspondent had gone straight up-stairs instead of going away, he would have been master of the situation.

E. R. B.—Our correspondent should consult some authoritative work on the subject, such as Dr. Ballard's essay on Vaccination.

THE SOUTH-WESTERN PROVIDENT DISPENSARY.

To the Editor of THE LANCET.

SIR,—With reference to the letter of Dr. Burton Payne in your issue of last week, we do not wish to discuss the grounds of his objection, as the dispensary committee have decided on providing a place elsewhere to receive and supply medicine to the poor patients, as doing so in Denbigh-street seems such a heinous offence; but cannot help saying that, in face of the alleged unsuitableness of its "habitat," it is remarkable that inmates of the following houses have gladly availed themselves of its benefits—viz., Nos. 25, 63, 69, 72, 94, 88, 56, 74, 112, and 108, in *Denbigh-street*, and Nos. 6, 13, and 22, in *Denbigh-place*, beside far greater numbers in Moreton place and terrace, and Charlwood-street immediately adjacent; and that a total of nearly 100 signatures of neighbours have been placed to a memorial, *disclaiming* any objection to it in 1869, again in 1870, and yet again in 1871, besides numerous signatures to a proposed memorial to the Marquis of Westminster to avert its threatened removal.

Yours obediently,
Denbigh-street, Feb. 27th, 1871. H. VENNEAU, Secretary.

*** We are quite of opinion that there is as much or even greater need of provident dispensaries in localities generally occupied by the independent classes as in those which are exclusively poor. It is certainly preferable that the servants and dependants of the rich should make an effort to pay for medical attendance, instead of being sent to the public hospitals, where they learn the first lessons of pauperism. Dr. Payne must have completely misapprehended the object of provident dispensaries if he supposes they are to be used by "parish pauper patients." On the contrary, the terms of admission are only secured by regular payments when the members are well, and such payments are obviously beyond the means of paupers. We can only rejoice, therefore, that so many persons are to be found already on the list, always supposing that the circumstances of each member have been duly ascertained by the Committee, so as to secure the exclusion of persons who are able to pay the usual fees.—ED. L.

Mr. John Ewens (Cerne Abbas, Dorchester) is of opinion that ergot often acts prejudicially on the fœtus, particularly when given in the early stages of labour, when the os uteri is either undilated or undilatable, and the pains are "false." Ergot, he thinks, by exciting undue and prolonged contractility, retards the blood in the sinuses and in the maternal portion of the placenta, so as to interfere with healthy changes in the fœtal blood. When given prematurely, it is apt to convert into a troublesome what would have been only a tedious labour; but in the later stages, especially in women whose uteri are atonic, with tendency to flooding, its judicious employment is most satisfactory.

Dr. W. W. Morgan is thanked for his communication, which we shall take an early opportunity of noticing in connexion with the general subject of medical fees for life insurance transactions.

Epsilon.—The qualification is not a double one. A licence in medicine as well as a licence in surgery is required.

Mr. C. J. B. Johnson is referred to Dr. Ballard's book on Vaccination for details such as he asks for. Generally we may say that the right side of the abdomen is the best place for vaccinating, shaving a space of it about ten inches long and six or eight broad, beginning from the side of the udder.

A PAMPHLET, entitled "Suggestions as to the Reorganisation of the Army Medical Department" shall receive notice next week if possible.

STRONG LANGUAGE FROM THE "UNCO' GUID."

THE first Report on Parliamentary Petitions presented during the present Session contains a petition from "the United Presbyterian Presbytery of Kircaldy," and another from the Minister, Elders, and Deacons of the Free Middle Church, Perth, both of which pray for the repeal of the Contagious Diseases Acts. Enraged piety is rather given to language more forcible than complimentary to the objects of its wrath, and hence it is that while moderately *righteous* people, who entertain doubts of the wisdom of the Contagious Diseases Acts are content to express those doubts in moderate terms, the "unco' guid" are moved to stigmatise the said Acts as "a gross infringement of personal liberty," as "disgusting and degrading in their details," as "immoral in principle," and as "cruel and indecent in detail," and so on. If abuse and argument were synonymous, what a strong case the opponents of the Acts would have.

F. R.—The articles in question have not escaped our attention; but we considered that notice of them would only give them additional publicity, which they certainly do not merit.

T. B. C. R. W.—Certainly not. A medical man may practise where he likes, and he does wisely, if in delicate health, to select as a place of residence one where he is likeliest to continue to be able to practise.

THE Report of the Inspector-General of Recruiting, and the second Report of the Committee on the Royal Hospitals of Chelsea and Kilmainham, have been received; but we are unable from press of matter to notice them this week.

A Constant Reader.—Yes, from a public vaccinator or qualified practitioner engaged in vaccination. It is obtained by attendance at one of the Privy Council stations—Tottenham-court-road Chapel; or Surrey Chapel, Blackfriars-road.

R. W.—We apprehend that without special contract to the contrary effect, mileage must be reckoned from the house, not from the surgery.

MILK AS A CARRIER OF CONTAGIUM.

To the Editor of THE LANCET.

SIR,—Dr. Ballard's most interesting paper on the Spread of Typhoid Fever by means of Milk recalls to my mind the following circumstance:—

During the last outbreak of cholera some of the prisoners in Mountjoy Prison, Dublin, contracted the disease. They were completely isolated, and apparently protected from all sources of contagion; and yet, I believe, they were the only inmates of the prison who suffered from cholera. I suggested to Dr. Robert M'Donnell, the visiting surgeon, that the prisoners probably received the virus of the disease in the milk supplied to them. It is well known that in this city milk is almost invariably adulterated with from 25 to 30 per cent. of water, until very lately obtained chiefly from city pumps. Some time ago a woman, who applied for medical relief at Dr. Steevens's Hospital, attributed her illness—severe retching and violent abdominal pain—to a drink of milk which she had just taken. On examining the milk, I found it to possess a most offensive odour of sulphuretted hydrogen, and to contain 45 per cent. of added water. It was evident that the water used for the purpose of adulterating the milk was extremely impure. Dr. Grimshaw, physician to Cork-street Fever Hospital, informs me that occasionally a large number of patients in that institution suddenly and simultaneously get severe diarrhœa, which he has reason to believe is attributable to the use of adulterated milk.

Yours truly,

CHARLES A. CAMERON,

February, 1871. Professor of Hygiene, Roy. Coll. Surg., Dublin.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Rutherford; Dr. Forbes Winslow; Mr. Gamgee, Birmingham; Dr. Fuller; Dr. Hall, Brighton; Dr. Ross; Mr. Norton; Mr. Tobin; Mr. Holmes; Dr. Sparks; Mr. West, Birmingham; Dr. Pringle, Parramatta, N.S.W.; Mr. R. Clarke; Mr. Cooper, Canterbury; Mr. Thorndike, Torquay; Dr. Williams, Norwich; Dr. Ashton, Gayton; Dr. Oliver, Edinburgh; Dr. Farquharson, Rugby; Mr. Barnes, Bath; Mr. Chadwick; Mr. Crowther; Mr. Rayner; Dr. Hall, Torquay; Mr. Strickland; Dr. Neild, Melbourne; Mr. Johnson, Whitwick; Mr. Harrison; Mr. Bagster; Mr. Harding; Dr. Dixon, Cardiff; Mr. Buist; Dr. Vanderstraaken, Ceylon; Mr. Thomas; Mr. J. Brown; Mr. Crawford; Mr. Sutton; Rev. W. E. Davies, Abergavenny; Mr. Price; Mr. Boutflower, Strangeways; Mr. Chapman; Mr. Jenks; Mr. Phillips, Dursley; Mr. Little, Woolton; Mr. Dobson; Mr. R. Wilson; Mr. Evans, Hull; Mr. W. Morrish; Mr. Davy; Dr. Evans, Narberth; Mr. Ellis, Chepstow; Mr. Peters, Brighton; Dr. Purvis; Mr. Waller; Dr. Rogers; Mr. Baker; Mr. T. James, Birmingham; Mr. Liman, Wilmsley; Mr. Symonds, Oxford; Dr. Watson, Wortley; Mr. Jones; Dr. Crowther, Luddenden; Mr. Sanger, Alfriston; Dr. Stiles, Spalding; Mr. Caldwell; Mr. Hannay; Mr. Henley; Dr. Hatchell, Ravenstone; Mr. Henry; Mr. Barnes, Chepstow; Dr. Phillips; Mr. T. Whewell; Mr. Giles, Coggesha l; Mr. Whitmore, Heanor; Mr. Woodley; Dr. Speedy, Dublin; Dr. Felce; Mr. Gendles, Normanton; Mr. Sleman; Mr. Arthy; Mr. Atkinson; Dr. Conway Evans; Dr. Broster, Bristol; Dr. Allbutt, Leeds; Mr. Leaver; Dr. Peart, Exeter; Mr. Dyson; Mr. Watkin; Mr. Cox; Mr. Bennett; Mr. Fraser, Gosport; Dr. Crisp; Dr. Ewens, Cerne Abbas; Dr. Belcher, Burton-on-Trent; Mr. Williams, Truro; Mr. H. Vennean; Mr. Arnott; Mr. Kellogg, New York; Dr. Manning, Gladesville, N.S.W.; Dr. Fairsand, Lucknow; Mr. J. Moore; Cymro; Royal Institution; F. R.; C. S. E.; A Constant Reader; Chirurgus; R. W.; Only a Woman; A. P. S.; An Old Subscriber; M.D.; A. B.; Epsilon; An Inexperienced Theorist; H. W.; J. F. B.; Medicus; A Subscriber, Edinburgh; R. W.; Benedictus; A Busy Practitioner; Utilitarian; &c. &c.

Blackburn Standard, Australian Medical Gazette, Melbourne Age, Liverpool Mercury, City Press, Watford Observer, Sporting Times, Parochial Critic, Sheffield Daily Telegraph, Clifton Chronicle, Gazetta Medica di Bari, Saunders's News-Letter, Dublin Evening Express, Birmingham Morning News, and *Milk Journal* have been received.

Medical Diary of the Week.

Monday, March 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. General Monthly Meeting.
ROYAL COLLEGE OF SURGEONS OF ENGLAND. — 4 P.M. Prof. W. H. Flower, "On the Comparative Anatomy of the Teeth of the Mammalia."
MEDICAL SOCIETY OF LONDON. — 8 P.M. Mr. H. Bowes Bell, "On Enchondroma of the Thumb." — Mr. John Gay, "On a Case of Stricture," with Specimen. — Mr. John Pennefather: "Obstructions of the Eustachian Tube."—Mr. W. F. Teevan: "Remarks on Stricture."

Tuesday, March 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Dr. Foster, "On Nutrition of Animals."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following amongst other specimens will be exhibited:—Dr. Marcus Beck: Spindle-celled Sarcoma connected with Tibial Nerve. Dr. Greenhow: Cancer of Œsophagus. Dr. Dickinson: Spinal Cord in Tetanus. Mr. Weeden Cooke: Medullary Sarcoma of Cranial Bones associated with Scirrhus of the Breast; Scirrhus of the Brain associated with Scirrhus of the Breast. Dr. Payne: Cancerous Growth in Veins and Endocardium.
ETHNOLOGICAL SOCIETY OF LONDON.—8 P.M.

Wednesday, March 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND. — 4 P.M. Prof. W. H. Flower, "On the Comparative Anatomy of the Teeth of the Mammalia."
ROYAL COLLEGE OF PHYSICIANS. — 5 P.M. Gulstonian Lectures: Dr. Gee, "On the Heat of the Body."
HUNTERIAN SOCIETY.—7½ P.M. Council Meeting.—8 P.M. Dr. H. G. Sutton, "On Small-pox."
EPIDEMIOLOGICAL SOCIETY. — 8 P.M. The President (Dr. Seaton), "On the present Epidemic of Small-pox." — Dr. Grieve: "An Analysis of 800 Cases of Small-pox observed in the Hampstead Hospital during the present Epidemic."
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Drs. Braxton Hicks and Phillips: "Remarks on Tables of Mortality after Obstetric Operations" (continued). — Dr. Brunton: "A Case in which the Ovum was born entire, and the Child rescued alive fifteen minutes after."

Thursday, March 9.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 12; other Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 3 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Dr. Odling, "On Davy's Discoveries."

Friday, March 10.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND. — 4 P.M. Prof. W. H. Flower, "On the Comparative Anatomy of the Teeth of the Mammalia."
ROYAL COLLEGE OF PHYSICIANS. — 5 P.M. Gulstonian Lectures: Dr. Gee, "On the Heat of the Body."
QUEKETT MICROSCOPICAL CLUB.—8 P.M.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Dr. Tilbury Fox: "Three Cases of Tinea Circinata communicated from the Horse." — Mr. H. Lee, "On a Case of Removal of the Tongue for Cancer." — Dr. Duffin: "Case of Roseola Variolosa." — Mr. Christopher Heath, "On a Case of Complicated Stricture of the Urethra treated by Mr. Syme's Operation for Impermeable Urethra."
ROYAL INSTITUTION. — 9 P.M. Dr. W. B. Carpenter: "The latest Scientific Researches in the Mediterranean and Straits of Gibraltar."

Saturday, March 11.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. O'Neil, "On the Spirit of the Age."

TERMS FOR ADVERTISING IN THE LANCET.

For 7 lines and under	£0	4	6	For half a page	£2 12 0
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Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.